Transition from Primary to Secondary School

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Transition from Primary to Secondary School: findings from the Growing Up in Scotland study

CHILDREN, EDUCATION AND SKILLS

social research

Transitions from primary to secondary school

Growing Up in Scotland

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Transitions from primary to secondary school

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Responsibility for the opinions expressed in this report, and for all interpretation of the data, lies solely with the authors.

GROWING UP IN SCOTLAND

TRANSITIONS FROM PRIMARY TO SECONDARY SCHOOL

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Executive summary

Overview and objectives

Moving from primary to secondary school is an important marker of progression in children's lives, with increased choices and opportunities. To ensure children are well supported, it is crucial to get a better understanding of their primary-secondary transition experiences. A recent literature review commissioned by the Scottish Government (Jindal-Snape et al., 2019) identified important gaps in our knowledge about transitions, including lack of longitudinal dataset analysis, in a Scottish context. Drawing on data from the Growing Up in Scotland Study (GUS) – a large-scale longitudinal cohort study tracking thousands of children and their families across Scotland – this report aims to plug some of these gaps. Specifically, the report draws on data collected around the time the children were in the penultimate year of primary school (Primary 6) and when they were in their first year of secondary school (Secondary 1)[1].

The report addresses four key aspects of the transition experience:

- it identifies features of positive and negative experiences of the transition to secondary school;
- it explores differences in the transition experiences for children in different contexts and with different characteristics;
- it analyses the impact of the transition to secondary school on outcomes for children and their families;
- it explores other developmental and life events and how these may influence cognitive ability.

Methods

This report draws on data collected at the time children in the first GUS birth cohort (Birth Cohort 1 or BC1) were in Primary 6 (or 'P6', the penultimate year of primary school in Scotland, academic years 2014/15 and 2015/16[2]) and when they were in Secondary 1 (or 'S1', the first year of secondary school, 2016/17 and 2017/18).

[1] Throughout, references to primary school findings refer to data collected in P6 while references to secondary school findings refer to data collected at the time the children were in S1.

[2] The cohort children are born over a 12 month period from June 2004 to May 2005. As a result they straddle two school year groups. Data collection was phased over two years to ensure all children were at the same school stage at the point of data collection.

Data used were gathered from both children and parents. Primary 6 data are reported from 3,104 children and S1 data are reported from 3,290 children. The measure of transition experience used longitudinal data from 2,559 children who responded at both school stages and had complete data.

Transition experiences cover a number of elements including relationships with peers and teachers, academic matters and levels of school engagement and motivation. Seven variables linked to engagement and motivation – all measured in both P6 and S1 - were used in combination to construct a derived measure of 'positive/moderate/negative transition' (see section 2.4 for more detail on this measure).[3]

The report includes analysis of some of the individual elements of the transition experience, as well as findings using the composite measure described above. Only differences which are statistically significant at the 95% level are commented on in the text, unless otherwise specified.

Findings: the transition experience

Using the composite measure, for over one third (36%) of children, moving to secondary school was a positive experience. Nevertheless, a notable minority of children (22%) were categorised as having a negative transition experience. A further 42% reported a moderate transition experience, indicative of minor changes in some aspects of engagement and motivation once they entered secondary school.

In relation to enjoyment, engagement and motivation, children reported hating school more often (15% hating it 'often' or 'always') and were less likely to look forward to going to school (46% 'never' or 'sometimes'), compared with when they were in primary school (10% and 42% respectively). Reports of liking subjects such as English and maths were also lower in secondary school (39% and 36% liked English and maths 'a lot' in secondary school compared with 51% and 47% in primary school). However, it is important to recognise that overall levels of engagement and motivation were high during primary and secondary school, and the overall persistence of the majority of these positive attitudes was indicative of a positive or moderate transition for many children.

Moving to secondary school, 63% of children were still friendly with most or all of their primary school friends and 85% found it easy to make new friends. Levels of bullying

[3] Children were categorised as having a positive, moderate or negative transition experience based on the following factors, each of which were reported both while they were still in primary school (in Primary 6) and after they had moved to secondary school (in Secondary 1): How much they looked forward to going to school, how much they hated school, whether they had skipped school, whether the school had been in contact with parents about the child's behaviour, how often they tried their best at school and how much they liked English and maths.

were also generally lower in secondary school compared to primary school. For example, at primary school 53% of children had never been made fun of or called names, compared with 57% at secondary school. Even so, 15% of children found it difficult to make new friends, after moving to secondary school, suggesting that establishing good peer relationships may be a concerning aspect of the transition experience for a minority of children.

Most children felt the level of difficulty of schoolwork in secondary school was appropriate with over three-quarters for both maths (78%) and English (79%) saying the work was neither too hard or too easy. After moving to secondary school, 14% of children reported feeling pressured by school work 'quite a lot' or 'a lot' of the time. The majority of children felt that their teachers always or often treated them fairly, although the proportion who felt their teachers always treated them fairly fell sharply in the first year of secondary school compared to primary (44% compared with 76% respectively).

Findings: differences in the transition experience

The report identifies notable differences in the transition experience according to a range of factors. In particular, the following were associated with a higher risk of experiencing a negative transition and a lower chance of experiencing a positive one:

- being socioeconomically disadvantaged (living in lower income household - 30% of children in the lowest income group experienced a negative transition compared with 15% in the highest income group); in areas with a higher level of deprivation (28% of children living in the most deprived 20% of areas compared with 15% living in the least deprived 20% of areas); lower level of parental education (44% of children whose parents had no qualifications compared with 16% whose parents were degree educated);
- lower child expectations of secondary school - e.g. 42% of children who were not at all looking forward to going to secondary school experienced a negative transition compared with 15% who looked forward to secondary school a lot;
- lower levels of parental satisfaction with the support provided by the child's primary or secondary school (41% of children whose parents were very unsatisfied with the support offered experienced a negative transition compared with 19% whose parents were very satisfied), and less frequent contact from the secondary school.

Boys (25% compared with 18% of girls), children with additional support needs[4] (32% compared with 19% of children with no additional support needs), children living in

[4] Education (Additional Support for Learning) (Scotland) Act 2004, amended 2009, places specific duties on local authorities, with clear time scales for transition planning and practice for children and

single parent households (28% compared with 20% in couple households) and children with older siblings (24% compared with 19% of children with no older siblings) were also more likely to experience a negative transition.

Children experiencing a negative transition were more likely to find it difficult to make new friends (28% found it very hard compared with 22% of children who experienced a positive transition) and reported lower friendship quality (37% of children who experienced a negative transition reported poor friendship quality compared with 26% who experienced a positive transition). They were also more likely to feel pressured by school work in secondary school (58% felt pressured a lot compared with 17% who experienced a positive transition) and less likely to have regular involvement in sports, youth groups and other activities (20% compared with 37% who experienced a positive transition). Children with a negative transition experience also reported less positive relationships with their parents. This relationship was particularly notable after the children had moved to secondary school when 39% of children who experienced a negative transition had a poor relationship with their parents compared with 18% of children who experienced a positive transition.

Children moving from a large primary school to a large secondary school were more likely to experience a positive transition (40%) than those moving from a small primary to a small secondary school (28%).

Findings: impacts of the transition

All children increased their cognitive development score when moving from primary to secondary school, though the extent of change varied by their experience of transition. Children who had a positive transition experience (using the composite measure) demonstrated, on average, higher levels of improvement in their language development than children with a moderate or negative transition experience. Children with a negative transition experience showed an average increase of 3.6 points while those with a positive transition experience showed an increase of 5.4 points. This relationship remained even when taking into account other differences such as gender, income, level of area deprivation and levels of social, emotional and behavioural difficulties, indicating an independent relationship between transition experience and cognitive development that was not explained by any of these factors.

The move to secondary school creates two notable changes which may affect parental working patterns: a different school location – potentially requiring a change to arrangements for travel to and from school – and a longer school day. Only a very small minority of parents (7%) had changed their working hours as a result of their

young people identified as having additional support needs.

child moving to secondary school. Of these, a third increased their hours while around half changed their working pattern but maintained the number of working hours.

A majority of parents (86%) reported increased costs in relation to the child starting secondary school. Predominantly, these are costs associated with school uniforms and travel to school. Around one in four of those in the lowest income households found it 'difficult' or 'very difficult' to meet costs associated with their child's schooling despite financial help being provided through measures such as free school meals and the school clothing grant[5]. Unsurprisingly, families on higher incomes found it easier to meet the cost of school.

Findings: developmental and life events

During the transition period considered, only a small minority of children (7%) experienced events such as their parents separating or re-partnering. While 54% of children experienced at least one or more upsetting life event (e.g. death of a parent or other close family member, parental conflict) over this period, those in less advantaged socioeconomic circumstances were more likely to experience these events.

In the penultimate year of primary school, 14% of children were reported by their parents to have one or more additional support need. Towards the end of their first year of secondary school, this figure was 15%. Not all children with an additional support need reported by parents at P6 also had an additional support need reported at S1 and vice versa. Overall, 20% of children had some additional support needs at either P6 or S1 or both. In line with previous research, children with additional support needs at either of the time points were less likely to have a positive transition and more likely to have a negative transition than their peers who did not have any additional support needs at either time points. Of those who had additional support needs at either of the time points considered, 26% experienced a positive and 32% a negative transition. This compares with 39% and 19% respectively, of children who did not have additional support needs.

Two in ten children reported being bullied[6] in both primary and secondary school, and five in ten were not bullied at either time point. Experiencing bullying at both time points was more common amongst those in less advantaged socioeconomic

[5] Free school meals and essential clothing grants are available for families where parents are in receipt of certain benefits or tax credits. All children in Primary 1 to Primary 3 are eligible for free school meals.

[6] Bullying was measured by combining responses from questions asking children how often they experienced a range of bullying behaviours, such as how often other children picked on them by calling them names/leaving them out of games/chats and how often children were shoved, pushed/hit.

circumstances, while for the minority of children who were bullied in secondary but not in primary schools, this was a little more common amongst the more advantaged children[7].

The research showed that, once the experience of transition was taken into account, there was no independent relationship between any of these developmental and life events – experiencing parental separation or re-partnering; experiencing one or more upsetting life events; experiencing increased levels of bullying or having an additional support need – and changes in their cognitive development during the transition period considered. This further supports the finding that there appears to be an independent relationship between transition experience and changes in the child's cognitive ability, even when taking into account a range of other factors present in children's lives, including various life events occurring alongside the transition.

Recommendations for policy and practice

At an overall level, the findings suggest that support for transition needs to acknowledge the myriad factors occurring alongside and potentially influencing a child's transition process. Where possible, schools and parents need to provide the support necessary to mitigate against negative impacts and ensure each child has a successful transition.

More specifically, based on the full findings from the research, the report provides a number of recommendations for policy and practice to help improve children's transition experiences:

- Similar to activities already being undertaken in relation to the Scottish Attainment Challenge, there may be benefit in targeting children from more socially disadvantaged backgrounds in order to provide more tailored transition support, however further research is needed.
- Reflecting existing legislative requirements, children with additional support needs already receive individualised transition support, both in primary and secondary school. However, with some of these children continuing to report poorer transitions, there may be some benefit in a review of the mode and content of this transition support to better meet the needs of these children.
- Ensure steps are taken to promote positive relationships with peers and teachers in children's first year at secondary school.

[7] The Scottish Government's national approach to anti-bullying – *Respect for All* – defines bullying as both the behaviour itself and its impact. The GUS questionnaire, finalised before the national strategy was published, measured only experience of bullying behaviour and not impact. In addition, not all behaviours included in the national strategy are covered by the GUS data.

- Address any anxieties and misconceptions about secondary school while children are still in primary school, including more familiarization with the secondary school environment, both physical and human.
- Identify what factors are at play in terms of decline in positive attitudes towards English and maths so that schools can effectively meet the needs of their pupils in relation to these aspects of the curriculum. Review their attitudes over time.
- Schools should continue to implement the national approach to anti-bullying in Scotland and share good practices where anti-bullying activity means that bullying is less prevalent.
- Ensure that relevant sports, youth groups and other activities – in particular, those related to the transition itself – are available and accessible to children, both at school and in the wider community.
- Foster and maintain good school-parent relationships through timely and relevant communication, to ensure parents are fully supported to help their child with the transition.
- Ensure work in this area is evidence based and incorporates pedagogical approaches that enhance children and young people's learning experience in school.

Recommendations for further research

This research provides new, unique and important evidence to help understand primary to secondary transitions. It also raises a number of further questions, including:

- Why are children from less advantaged socioeconomic backgrounds more likely to experience negative transitions, and what measures might be particularly useful to support these children?
- What might explain the relationship identified between children's transition experience and changes in their cognitive ability?
- Are the differences in transition experiences identified here inter-related with each other, and does this explain some of the relationships identified in this report (e.g. differences between boys and girls)?

1 Introduction

1.1. Background

This report was commissioned by the Scottish Government to explore the impacts of the transition to secondary school for children and their families, and the factors that shape their transition experiences. It is intended to inform policy and practice relating to how best to support children in the transition to secondary school, seeking to ensure that this is a positive experience and improving related educational and wellbeing outcomes as a result. There is a policy imperative to understand what is happening in Scottish schools in order to ensure that, as the 2020 National Improvement Framework (NIF) and Improvement Plan states, "our schools are places that promote positive relationships and behaviour…" and "children and young people…thrive, regardless of their social circumstances or additional needs" (Scottish Government, 2019).

The report is based on analysis of data from the Growing up in Scotland (GUS) study. It draws on the findings and recommendations, including for further research/analysis, of a systematic literature review commissioned by Scottish Government (Jindal-Snape et al., 2019) and subsequent conversations with policy makers.

1.2. Summary of findings from the systematic review

The review of international empirical research covered the period 2008-2018 and was conducted to understand children's experiences of primary-secondary transitions, the impact of primary-secondary transition on children's educational and wellbeing outcomes, and factors that had an impact on experiences and outcomes (see Jindal-Snape, Cantali, MacGillivray & Hannah, 2019; Jindal-Snape, Hannah, Cantali, Barlow & MacGillivray, 2020).

Using the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) approach (2010), 96 studies were included in the review. However, despite primary-secondary transitions being a much-researched area internationally (Jindal-Snape, 2016), there is a paucity of studies in Scotland (e.g. Hannah & Topping, 2012, 2013; Jindal-Snape & Foggie, 2008; Jindal-Snape & Cantali, 2019; West, Sweeting & Young, 2010; Zeedyk, Gallagher, Henderson, Hope, Husband & Lindsay, 2003). Only seven studies set in a Scottish context (out of 34 UK studies) were part of the review, because this was limited to the period between 2008 and 2018.

The literature review identified several evidence gaps, some of which are addressed in this report. These include lack of information about: the proportion of children experiencing positive or negative transitions; the impact of primary-secondary transitions; the differential impact of transitions on children with additional support

needs and the association between household demographics, school characteristics, transition experiences and outcomes. Further, the review identified a lack of studies that collected data from pupils and all other stakeholders, and most were small scale. For example, only 18 of the 96 studies covered by the review had collected data from a sample of more than 1000 children and young people, only one study reported on data from more than 1000 parents and only a single study had data from teachers. The review also highlighted the paucity of secondary analysis of up-to-date datasets in general, and in Scotland in particular.

Primary-secondary transition is an ongoing process of psychological, social and educational adaptation over time, due to changes in context, interpersonal relationships and identity (Jindal-Snape, 2018). Further, Multiple and Multi-dimensional Transitions (MMT) Theory (Jindal-Snape, 2016, 2018) emphasises that children experience multiple transitions at the same time, in multiple domains (e.g. social, academic) and multiple contexts (e.g. school, home). These multiple transitions impact each other and can trigger transitions for other people (e.g. friends, parents, teachers) and vice versa, meaning that transition overall is a multidimensional process shared across individuals and contexts. The GUS data are well suited to use this conceptualisation and theoretical lens, as they include data collected directly from children, concerning different domains and contexts, as well as data collected from parents over time. The data can also provide some insight into how children's transitions may be related to transitions for parents.

Typically, the move to secondary school occurs around the period of adolescence, with concomitant physical and psychological changes (Ng-Knight, Shelton, Riglin, McManus, Frederickson, & Rice, 2016) as well as heightened anticipation and anxiety about moving to a new school. Therefore, using GUS data from when cohort children were in the second last year of primary school (Primary 6, or P6) and when they were in the second term of the first year of secondary school (Secondary 1, or S1), provides a better comparison of the impact of transitions than data collected immediately before or after starting secondary school.

Approximately 50,000 children started secondary school in Scotland in 2019; it is crucial that not only are they able to deal with transitions well, they should be supported to flourish. Moving up to secondary school is a marker of progression with increased choices and opportunities, including different subjects, better educational and sports facilities, and more opportunities to make friends and develop positive relationships with several teachers (Jindal-Snape & Cantali, 2019; Jindal-Snape & Foggie, 2008). However, the primary-secondary school transitions literature has predominantly reported the challenges associated with transition such as the negative impact on academic grades (Hopwood et al., 2016) and psychological wellbeing (Jackson & Schulenberg, 2013); and less positive attitudes towards subjects (e.g. Mathematics, García et al., 2016). Also, the literature reports on particular challenges

faced by children and young people considered more vulnerable during transition, such as those with additional support needs (Mandy et al., 2016 a, b). This is concerning, as research suggests that the negative impacts of primary-secondary transition experiences can be long term and can lead to young people not completing high school (West et al, 2010) with ensuing implications for the workforce and the economy.

The findings about negative experiences and outcomes are surprising, as policy makers, practitioners and families have been trying to facilitate positive transitions for over five decades. Further, it is not clear whether this is due to transition practices not being effective or as a result of the limitations of the research studies. For instance, there is a dearth of studies that have used a robust long-term longitudinal design, large sample sizes, and/or reported the proportion of children who had negative outcomes and whether these changed over time. Additionally, only a limited number of studies have been carried out in Scotland. Therefore, undertaking an analysis of a longitudinal dataset like Growing Up in Scotland (GUS), with a relatively large sample size, becomes important for us to get a clear picture of primary-secondary transition outcomes in Scotland.

1.3. Report overview

This report presents analysis of recent data collected in Scotland including information that is crucial to understanding primary-secondary transitions in Scotland. As transitions are situated within the local educational, social, political and cultural context, analysis of data collected as part of the Growing Up in Scotland study (GUS) – a large-scale longitudinal study tracking the lives of thousands of children and their families across Scotland – is timely. With data from a little over 3000 parents and children, GUS has the potential to provide more robust findings and conclusions than those uncovered in the systematic review.

Recently, due to Covid-19, schools have been closed without children experiencing all transition practices of primary and secondary schools. Although the GUS data were collected prior to Covid-19, this report provides insights that would be relevant in such a situation, so that support can be provided virtually and through families. For instance, it highlights the children and families who will need even more support than usual.

Drawing on GUS data, this report aims to plug some of the evidence gaps identified by the systematic review. Specifically, the report draws on data collected around the time the study children were in the penultimate year of primary school (Primary 6) and when they were in their first year of secondary school (Secondary 1). The report addresses four key aspects of the transition experience:

- it identifies features of positive and negative experiences of the transition to secondary school;
- it explores differences in the transition experience for children in different contexts and with different characteristics;
- it analyses the impact of the transition to secondary school on outcomes for children and their families;
- it explores other developmental and life events and how these may influence cognitive ability.

These aspects are addressed in Chapters 3, 4, 5 and 6. Details of our approach, including the data, are provided in Chapter 2. Finally, in Chapter 7 we summarise and discuss the study findings and set out recommendations for policy and practice.

2 Methodology

2.1. About the Growing Up in Scotland study

GUS is a longitudinal research study which tracks the lives of thousands of children and their families in Scotland from the early years, through childhood and beyond. The main aim of the study is to provide new information to support policy-making in Scotland, but it is also intended to provide a resource for practitioners, academics, the voluntary sector and parents.

To date, the study has collected information about three nationally representative cohorts of children: a child cohort and two birth cohorts. Altogether, information has been collected on around 14,000 children and families in Scotland.

This report draws on data collected at the time children in the first GUS birth cohort (Birth Cohort 1 or BC1) were in Primary 6 (or 'P6', the penultimate year of primary school in Scotland, academic years 2014/15 and 2015/16 for this cohort[8]) and when they were in Secondary 1 (or 'S1', the first year of secondary school, 2016/17 and 2017/18 for this cohort).

BC1 is comprised of a nationally representative sample of 5217 children living in Scotland when they were 10 months old who were born between June 2004 and May 2005. These families first took part in the study in 2005/06 when the cohort children were just 10 months old. Since this time, data for these children and their families were collected annually until they were just under 6 years old, and then biennially at age 7-8, when the children were in P6 (age 10-11) and when the children were in S1 (age 12-13). At the time of writing (2020), the tenth sweep of face-to-face data collection with this cohort is underway. At this tenth sweep the cohort children are in their third year of secondary school (S3, age 14-15). In 2018, as part of the ninth sweep of fieldwork, an additional 502 families with a child in the same age range (i.e. born between June 2004 and May 2005) were recruited to the cohort[9].

2.2. Overview of data

As already noted, this report draws predominantly on data collected at the time the children were in the spring or summer terms of P6 and S1. As children in the cohort

[8] The cohort children are born over a 12 month period from June 2004 to May 2005. As a result they straddle two school year groups. Data collection was phased over two years to ensure all children were at the same school stage at the point of data collection.

[9] For further details please see the User Guide accompanying the age 12/sweep 9 dataset, available from the UK Data Service.

fall into two school year groups, fieldwork was phased over two years for each sweep to ensure all children were at the same school stage at the point of data collection. This means P6 data were collected in January to June of either 2015 or 2016 and S1 data were collected in January to June of either 2017 or 2018. Because the cohort is comprised of a nationally representative sample of children the results should be understood to broadly represent all children of the respective age and school stage living in Scotland at the time point in question. For example, the results presented for the GUS children at the time they were in S1 are roughly representative of all children in Scotland who started S1 in 2016 or 2017. The small number of children who were not in P6 and S1 at these sweeps (for example, because their entry to primary school was deferred or they repeated a year in early primary school) were excluded from the analysis.

For cross-sectional findings, all those who responded at the relevant sweep were included in the analyses. At sweep 8 (P6), the total number of child respondents was 3,104, in addition to 3,150 parent/carer respondents. At sweep 9 (S1), 3,290 children responded, in addition to 3,419 parents or carers. Longitudinal analyses, including the measure of transition experience, were only carried out on children who responded at both sweeps 8 and 9 (n=2,761). After accounting for item non-response on the items used to assess transition experience, a final sample of n=2,559 was used for the longitudinal analyses. Throughout the report, any analysis which combines data from multiple sweeps (such as the transition measure) is based on the longitudinal sample.

To date, the main data collection on GUS takes place through annual or biennial 'sweeps' of face-to-face interviews with children and parents in their homes. This report draws on data collected from both children and parents, as well as on objective measures of the child's language ability at the time the children were in Primary 6 and Secondary 1 (see details in sections 2.4, 2.5, 2.6 and 2.6.3). Full data documentation for all sweeps and variables are available online[10] [11].

2.3. Limitations of the analysis

GUS is a multidisciplinary, holistic study designed to capture information about the many circumstances and outcomes which occur in the lives of children and families and the characteristics and factors which may be associated with these. GUS was not specifically designed to measure the primary to secondary school transition. As such, certain compromises have been made, e.g. it was not possible to consider all possible child outcomes – either because data was not available or extended analysis was required which was beyond the scope of the work. As such, cognitive ability was

[10] Sweep 8 questionnaire: http://doc.ukdataservice.ac.uk/doc/5760/mrdoc/pdf/5760_data_documentation_cohort1_sweep8.pdf
[11] Sweep 9 questionnaire: http://growingupinscotland.org.uk/wp-content/uploads/2019/08/BC1-Sweep-9-Data-Documentation.pdf

selected as the outcome most suitable for use in this analysis given its robust, objective measurement and correlation with a range of other outcomes, rendering it a useful proxy of the child's general developmental health (Law et al., 2017). However, this does have limitations and may not be the most appropriate impact measure in specific contexts, such as looking at children with additional support needs.

A composite measure of transition experience was constructed using the best data available. A full description of how this measure was constructed is included in section 2.4. Although this involved creating a seven-point scale measuring more positive or negative transition experience, these were grouped to categorize transition experience as negative, moderately positive and positive. Grouping the data in this way was necessary because there was insufficient statistical power to individually consider each of the categories on the full scale variable. The thresholds were determined with the aim of demonstrating levels of difference between experiences which are meaningfully associated with a range of explanatory factors as one might expect. The thresholds are not intended to be reliable and absolute prevalence estimates of the experience of transition; they are effectively a relative measure of experience and how they are associated with the factors considered.

It is acknowledged that many of the characteristics and circumstances of children and families are inter-related. The multivariate analysis which is used controls for these underlying relationships. Where relevant, this has also been commented upon when interpreting the findings.

2.4. Measuring transition

For the initial analysis stage, positive and negative features associated with the transition to secondary school were examined using GUS data collected at both the P6 and S1 sweeps. The variables selected for this stage of the analysis are presented in Table 2-1. Simple frequencies of all variables listed in the right-hand column were run to provide an initial understanding of the extent of positive and negative experiences of transition.

Following the descriptive analysis of comparable variables from primary and secondary school, some of these variables were then used in combination to construct a derived measure of 'positive/moderate/negative transition'. Some questions were only asked in the P6 interview, some only in the S1 interview and others at both time points. Thus, not all items had comparable data from both time points. The engagement and motivation questions were asked at both time points and presented the best opportunity to derive a coherent, longitudinal transition measure.

Data from P6 and S1 for each of the seven variables listed under the 'engagement and motivation' section in Table 2-1 were used to construct this measure. For example, negative transitions would be indicated by an increase in school absences (truancy), a decline in positive attitudes towards studying and an increase in school related issues.

Table 2-1 *List of variables used to understand transition experience*[12]

Theme	GUS variable label	School year	Respondent
Relationship with Peers	Child has made new friends	S1	Parent
	How many of your friends from primary school are you still friendly with?	S1	Child
	Child misses old friends from primary school	S1	Parent
	How easy/difficult to make new friends at secondary school	S1	Child
	Child anxious about making new friends	S1	Parent
	How often do other children pick on you…?	P6, S1	Child
	How many of your friends from primary school are attending the same secondary school as you?	S1	Child
Relationship with teachers	My teacher(s) treat(s) me fairly	P6, S1	Child
Learning	How would you describe the work in your maths/English class at secondary school?	P6, S1	Child
	Child is coping well with school work	S1	Parent
	Thinking about an average week during term-time, how many hours do you usually spend doing homework?	S1	Child
	Child gets too much homework	S1	Parent
	How pressured do you feel by the schoolwork you have to do?	S1	Child
Engagement and motivation (components of the composite transition measure)	I look forward to going to school	P6, S1	Child
	I hate school	P6, S1	Child
	Have you ever skipped school when your parents didn't know even if only for a half day or a little while/single lesson?	P6, S1	Child
	How often do you try your best at school?	P6, S1	Child
	How much do you like reading/How much do you like English?	P6, S1	Child
	How much do you like doing number work/How much do you like maths?	P6, S1	Child
	Whether school has been in contact with parent regarding child's behaviour, attendance etc.	P6, S1	Parent

For each of the seven engagement and motivation variables, a binary measure was constructed by grouping the response options into either positive or negative

[12] See Appendix B, Tables 9-1 to 9-4 for a full list of response options.

transitions between primary and secondary school[13]. Consistently positive (e.g. child 'always' or 'often' looked forward to going to school at both sweeps) as well as changes from negative responses in primary school to positive responses at secondary school (e.g. child 'sometimes' or 'never' looked forward to going to school in primary but 'always' or 'often' looked forward to school in secondary) were classified as a positive transition. Conversely, consistently negative responses across both waves or a change from a positive to a negative response across waves were classified as a negative transition. A negative transition for each variable was given a score of 0, while a positive transition was given a score of 1.

These binary measures were then summed to produce a combined measure with a low of 0 (indicating no positive change on any of the 7 items) and a high of 7 (indicating a positive change on all of the seven items).

To create broad categories of transition experience, we split the sample of children into 3 groups, according to their overall transition score. Those with scores between 0 and 3, comprising 22% of the sample, were considered to be experiencing broadly negative transition overall, although children in that group could have shown improvement on up to 3 of the items under the engagement and motivation theme. Scores of 6 and 7 were defined as indicative of a positive transition and comprised 36% of the sample. The remaining 42%, with scores of 4 or 5, were classified as experiencing a moderately positive transition.

The resulting proportions who experience positive or negative transitions via these cut offs are broadly in line with observations from previous studies (Waters et al, 2014a; Jindal-Snape and Cantali, 2019).

2.5. Factors associated with transition between primary and secondary school

Analysis for this section utilised the measure of positive/moderate/negative transition outlined in the previous section. A series of bivariate analyses were conducted of the transition measure by selected child characteristics, socioeconomic and demographic factors and measures related to school, family and peers. Further details on the variables included are provided in the following sections.

2.5.1. *Socioeconomic, demographic and other child characteristics*

Variables considered under this domain included:

- Child's gender, ethnicity and religion

[13] The grouping together of generally positive or negative responses to create a longitudinal transition variable does not capture highest levels of positivity or lowest levels of negativity which were apparent in the cross sectional analysis.

- Socioeconomic background (household equivalised income, highest parent level of education)
- Household composition (single vs couple parent household and whether there was an older sibling in household[14])
- Area characteristics (level of deprivation and urban/rural classification of child's home address)

Area deprivation was assessed using quintiles of the Scottish Index of Multiple Deprivation (SIMD)[15]. Urban/rural classification used the Scottish Government's two-fold measure[16].

2.5.2. *School, family and peer-related measures*

Differences in the experience of transition were described according to:

- Support from schools (parent reported communication from secondary school, parent satisfaction with support from primary and secondary schools; measured in S1)
- Teacher relationships (whether child thinks teacher treats them fairly; measured in P6 and S1)
- Child expectations of transition (whether child was looking forward to going to secondary school and whether going to secondary school of choice; measured in S1)
- Perceptions of pace of school work (whether child is coping with schoolwork in S1; measured in S1)
- Family relationships (quality of parent-child relationship; measured in P6 and S1)
- Peer relationships (friendship quality and whether bullied; measured in P6 and S1)
- Whether the child has been identified as having additional support needs (measured in P6 and S1)

[14] The presence of an older sibling in the household was derived from banded age categories as included in the GUS data. It was therefore only possible to identify siblings who were 12 years old or older at P6. As the cohort children were aged around 10.5 years old at this sweep, use of the banded variable may have missed some older siblings.

[15] For more information on SIMD see https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/

[16] For more information on urban rural classification see https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/

- Social networks and activities (whether any regular involvement in sports, youth groups or other activities; measured in S1)
- School characteristics (urban/rural and school size; measured in P6 and S1)

To derive the measures for quality of parent-child relationships, a series of child report questions were used. Children were asked to respond to six statements for each parent or parent figure in their household[17] and say whether the statement is 'always true', 'often true', 'sometimes true' or 'never true'. Responses were given a numeric value. An average score for each child was then calculated and these average scores were subsequently grouped into 'excellent, 'good' and 'poor'.

Friendship quality was similarly assessed using six child response items.[18] Similar to the approach taken for the measure of parent-child relationship, responses were summed and grouped so that higher values indicated better quality relationships .

Child reports of bullying were collected in both P6 and S1. Three separate items[19] were combined to create an overall indicator of bullying at both time points. The Scottish Government's national approach to anti-bullying – *Respect for All* (Scottish Government, 2017) – defines bullying as both the behaviour itself and its impact. The GUS questionnaires, finalised before the national strategy was published, measured only experience of bullying behaviour and not impact. Nevertheless, the behaviours given as examples in the national strategy overlap with the behaviours measured in the GUS data.

Since the cohort children in GUS started school, at each sweep of data collection parents were asked whether the child had been identified by their school or any other professional as having any additional support needs. If so, they were asked which type of support need the child had. At subsequent data collection sweeps, for each additional support need recorded at an earlier sweep, parents were asked if the child still had this need. They were also asked if the child had any other (new) additional support needs not previously recorded.

The measures of school characteristics were derived from administrative records which were linked with the survey data using details of the child's school collected during the interview, Urban/rural classification of the child's school used the Scottish Government's two-fold measure (this was also used in relation to the child's home address, see above). School size was derived separately for P6 and S1, based on

[17] See Appendix A for further details of how this measure was derived.

[18] See Appendix A for further details of how this measure was derived.

[19] See Appendix A for further details of how this measure was derived.

school roll data. The school roll measure was divided into quartiles, and schools in the lowest quartile (the smallest 25% of schools) were characterised as 'small', schools which fell into the middle two quartiles (between the 25th and 75th centiles) were classified as 'medium', and schools which fell into the highest quartile (above the 75th centile, the largest 25% of schools) were classified as 'large'. Classifications of school sizes are detailed in Appendix A.

2.6. Measuring the impact of transition on child and family outcomes

Child outcomes were measured using cognitive ability. Family outcomes were measured using parental working patterns and meeting the costs of secondary school. Further discussion on the range of outcomes which were relevant for consideration and decisions on why certain outcomes were selected is included in the corresponding sections of the report.

2.6.1. *Child cognitive ability*

Cognitive ability was measured using the Listening Comprehension subtest of the Wechsler Individual Achievement Test - Second UK Edition (WIAT-II UK). This subtest is part of a comprehensive individually administered test for assessing the achievement of children and adolescents aged between 4 years and 16 years and 11 months. WIAT is suitable for administration in a study like GUS, with the version used especially adapted for social surveys. For this report, Listening Comprehension scores obtained as part of the sweep 8 (P6) and sweep 9 (S1) data collection were used. Change in cognitive ability was calculated by subtracting the child's P6 standardised score from the S1 standardised score.

The change in cognitive ability measure was then entered as the dependent variable in a multivariate regression model with the transition measure as an independent variable. The model also controlled for gender and other selected social background variables. The full set of variables included in the model is as specified below:

- Positive/moderate/negative transition
- Gender
- Socioeconomic status (household equivalised income, highest parental education)
- Area characteristics of home address (area deprivation, urban/rural classification)
- Whether child identified with any additional support needs at primary school or secondary school respectively
- Child's social, emotional and behavioural development (measured using the 'total difficulties' score from the Strength and Difficulties Questionnaire)

2.6.2. *Parental working patterns and meeting the costs of secondary school*

To investigate the impact on families, two sets of measures were examined: one examining change in parental working patterns and the other exploring issues related to meeting the costs of secondary school. The data were taken from the S1 main carer questionnaire which included questions specifically aimed at measuring these issues. These included changes to parental working patterns, whether starting secondary school was associated with any extra costs and difficulties in meeting these costs. Univariate descriptive analyses were carried out for each of these variables. Bivariate analyses then explored the differences in impact across families in different circumstances, e.g. by lone/couple family household status and household income.

2.6.3. *Other life events*

The extent to which children experienced other developmental and life events between P6 and S1 was examined. Events of interest encompassed other important and influential areas of children's lives which may impact on their experience of the transition from primary to secondary school: their family/household situation; their peer relationships and their simultaneous experience of upsetting life events. The measures included were therefore:

- change in parent relationship status (whether parent separated, re-partnered or if there was no reported change)
- changes in experience of bullying between P6 and S1[20]
- experience of other upsetting life events. GUS routinely collects data on a wide range of significant or upsetting life events[21] which have occurred in relation to the child or family in the period since the previous interview. S1 data were used to identify the number of such events which had occurred since the P6 interview.

Changes in bullying were assessed using the bullying measures already derived. These variables were recoded to identify whether the child experienced bullying in primary school only, secondary school only, primary and secondary or neither.

Bivariate analysis explored how the occurrence of these life events varied between children with different characteristics, using selected socioeconomic and demographic variables. Finally, each of these measures were added to the multivariate regression model (as detailed in the previous section) to examine the association between primary to secondary transition and child outcomes whilst controlling for selected other variables.

[20] Bullying was selected as a proxy measure of peer relationships because the same question items were used at P6 and S1 thus allowing consideration of change in those relationships

[21] See Appendix A for the full list of upsetting life events and the proportion of children who experienced them.

2.7. Analytical approach and presentation of findings

All analyses were undertaken with weighted data, using Stata v16, and take into account the complex clustered and stratified sample structures. The survey weights aim to ensure that any bias in the data which occurs from non-response or attrition is addressed and that findings are representative. Where confidence intervals are included in the text or tables, these indicate the degree of uncertainty of the coefficient estimate.

Only differences which are statistically significant at the 95% level are commented on in the text, unless otherwise specified. Full results are provided in Appendix B.

Throughout the report, references to primary school findings refer to data collected in P6, the penultimate year of primary school while references to secondary school findings refer to data collected at the time the children were in S1, the first year of secondary school.

3 Experience of the transition to secondary school

3.1. Introduction

This chapter describes positive and negative experiences of the transition to secondary school that can be measured in the GUS data based on responses from children and their parents. Note that the majority of measures used to describe the experience were only asked as part of the secondary school interview (conducted when the children were in S1). However, engagement and motivation with school was measured both in primary school (in P6) and again in secondary school (in S1) meaning that these aspects constitute a direct measure of change between primary and secondary school in this study and was therefore chosen as a suitable measure of the transition experience.

First, the chapter provides a measure of the overall transition experience, derived based on repeated measures of engagement and motivation before and after the move to secondary school. Second, it examines the following aspects of the transition experience in turn: peer relationships, relationships with teachers, learning, and levels of engagement and motivation. As outlined below, each of these have been highlighted by existing international research as important aspects of the primary to secondary transition.

3.1.1. *Existing international research*

Before outlining the findings from our analysis of GUS data, below we outline key findings from the existing literature.

First, at an overall level, only a handful of the existing studies between 2008 and 2018 covered in the literature review provide a breakdown of the percentage of children experiencing positive or negative transitions. In a study with a larger sample size of 2078 children, Waters et al. (2014a) found that 70% reported that transition was easy or very easy. Similarly, Jindal-Snape and Cantali (2019), who had a small sample (n=61), found that a few months after moving to secondary school, 40 (66%) children reported that they had no problems with the move to secondary school, and 16 (26%) reported that they had experienced problems, with five (8%) indicating they did not know. Importantly, the children's view of their transition experience changed at the end of the first and second years of secondary school, with problems being resolved for some and emerging for others over time.

In relation to peer relationships, existing international research has suggested that children generally look forward to making new friends in secondary school (Jindal-

Snape & Cantali, 2019; Jindal-Snape & Foggie, 2008; Vaz et al., 2014), see it as a fresh start to 're-inventing' themselves and forming friendships on that basis (Farmer, et al., 2011), having bigger groups to choose friends from (Booth & Gerard, 2014; Neal & Frederickson, 2016) and being able to make friends with older peers, something which seemed to enhance their self-esteem (Symonds & Hargreaves, 2016). On the other hand, several studies have reported children's concerns about relationships with peers during primary-secondary transitions. For example, Hammond (2016) and Jindal-Snape and Cantali (2019) note pupils' concerns about losing or falling out with existing peers, making new friends and adapting to a new peer group and moving without any peers from their primary school (Ashton, 2008). Others (Scanlon et al., 2016) have found that pupils with additional support needs worry about forming friendships with children from the same age group as they were used to developing friendships with younger children in primary school. These studies also report concerns about bullying.

Teachers, and their role during transitions, have been the focus of several studies. Positive relationships have been found to enhance children's academic motivation (Frey et al., 2009) and to facilitate integration into their new secondary school (Ganeson & Ehrich, 2009). A good teacher-pupil relationship has been found to be the strongest predictor of wellbeing for typically developing children in secondary school, although there were differences based on gender and whether the school was mainstream or special school (Wolters et al., 2012). In some existing studies children reported that their secondary school teachers were dynamic and knowledgeable (Cueto et al., 2010) and that they were able to build positive relations with them (Booth & Sheehan, 2008). Nevertheless, several studies have reported children having negative perceptions of their teachers as well as negative relationships between children and their teachers. Children's concerns included a lack of trust and respect from secondary school teachers (Tobbell & O'Donnell, 2013), and higher and inconsistent expectations (Jindal-Snape & Foggie, 2008). Longobardi et al. (2016) argue that the relationships between children and teachers were both a protective and risk factor associated with both academic achievement and behavioural needs. In this study we consider only one aspect of the teacher-pupil relationship, namely children's reports of how fairly (or not) they feel treated by their teachers. However, feelings of fairness may have a substantial impact on the overall teacher-pupil relationship.

The existing literature suggests that children have both positive and negative transition experiences related to academic aspects of secondary school. For example, some studies report the positive aspects of academic life in secondary schools, such as children enjoying the opportunities for new, challenging and varied learning (Ganeson & Erlich, 2009; Mackenzie et al., 2012; Neal & Frederickson, 2016; Symonds & Hargreaves, 2016). However, Booth and Gerard (2014), who collected data over four years, found these positive attitudes did not maintain over time. Further, some studies reported negative experiences; one suggested increased levels of academic difficulty

(Rice et al., 2011) while another reported a larger volume of homework (West et al., 2010).

Generally, in relation to engagement and motivation, existing international research suggests that primary-secondary transitions can lead to both positive and negative experiences for different children. Even so, more commonly, existing studies highlight negative experiences. This includes Hebron's (2017) study highlighting decreased school connectedness (although this did seem to improve by the end of the first year of secondary school), and studies reporting anxiety and depression (Lester, Waters & Cross, 2013), an increase in absences, and a decline in motivation to learn and academic attainment (Benner & Graham, 2009; Deieso & Fraser, 2018).

GUS provides data on a range of these issues and experiences for children in Scotland.

3.2. Overall transition experience

Few existing studies ask children a direct question about their transition experiences. Similarly, no direct question was asked about transition experiences in GUS. Instead, using cross sectional reports of engagement and motivation provided before and after entry to secondary school, a longitudinal variable indicating overall transition experience was derived.

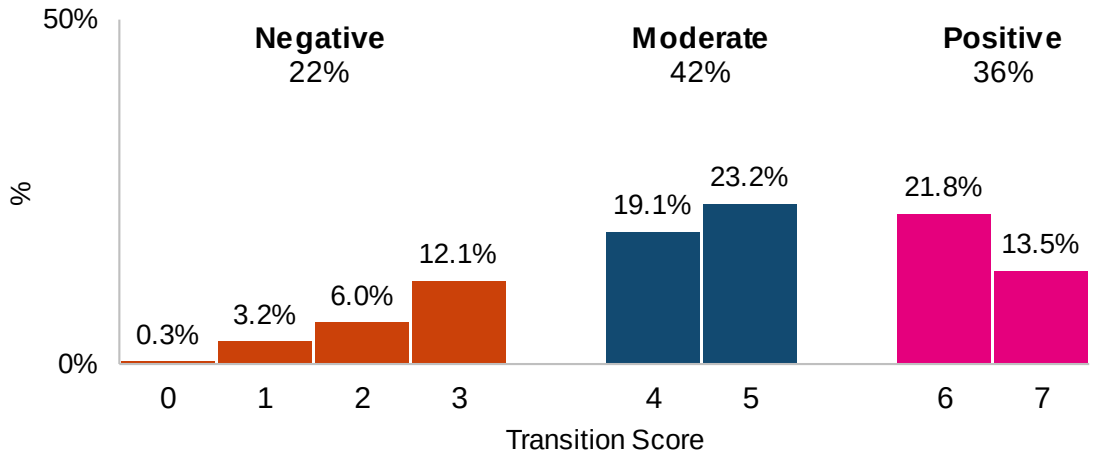
The measure of combined responses to seven variables to produce either a positive or negative change. For instance, in response to how often does the child try their best at school, "all of the time" or "most of the time" were classed as positive compared with "some of the time" and "never" which were negative[22].All items were then summed to give a transition score, between 0 and 7. The distribution of scores was unbalanced with a small number of cases having low scores and nearly 80% of the sample having scores of 4 or more, indicating that for the large majority of the children there was an improvement between P6 and S1 on at least 4 of the 7 items included in the composite measure.

Although cross sectional findings, comparing directly between primary and secondary school, showed that negative attitudes towards engagement and motivation were more common at secondary school, this applied to the minority of children. It is important to recognise that the clear majority of children, for all engagement and motivation outcomes, reported positive attitudes at both time points –the composite measured indicated that a minority of children (22%) experienced a negative transition, compared

[22] See section 2.4 for details of how this measure was constructed

with 36% of children who experienced a positive transition to S1. The largest proportion (42%) of children had a moderate transition.

Figure 3-1 *Proportions experiencing positive, moderate and negative transitions to secondary school*



Note. Data drawn from GUS sweeps 8 and 9. Unweighted base: n=2559. Numbers indicate weighted percentages.

3.3. Relationship with peers

Data from several questions asked of children and parents when the child was in S1 were used to explore peer relationships. These included:

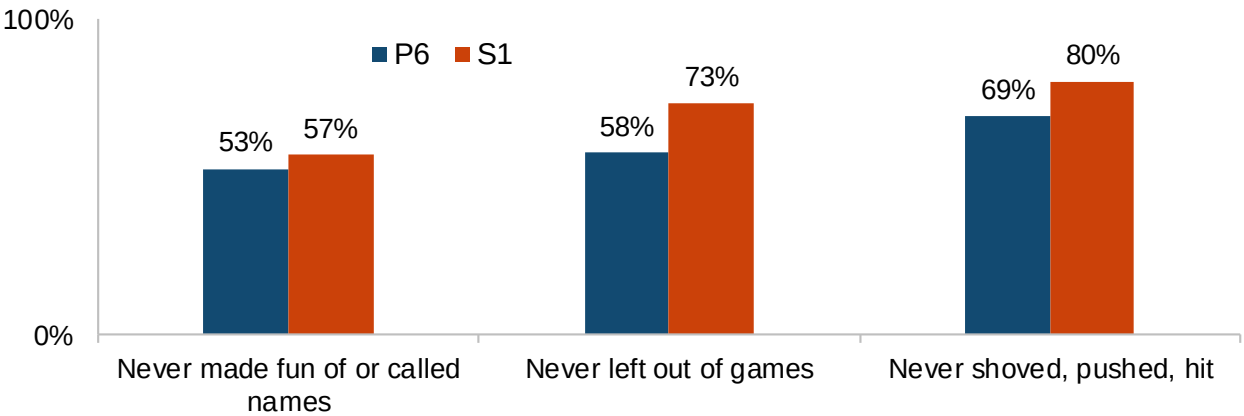
- Child
  - How many of your friends from primary school are you still friendly with?
  - How easy/difficult was it to make new friends?
  - How many of your friends from primary school are attending the same secondary school as you?
  - How often do other children pick on you…by calling you names or making fun of you? …by leaving you out of games and chats? …by shoving, pushing, hitting or picking a fight with you?
- Parent:
  - Whether child was anxious about making new friends
  - Whether child misses old friends from primary school
  - Whether child had made new friends at secondary school

Children generally reported positive feelings regarding their relationship with peers in their first year of secondary school (Table 9-2). Although the vast majority (83%)

attended secondary school with at least most (if not all) of their friends from primary, fewer, though still nearly two thirds, (64%) said that they were still friendly with most or all of their primary school friends and 5% were no longer friends with anyone from primary school. This proportion was similar among those who did not attend secondary with any of their friends from primary school and those who did. Therefore, although experiences were predominantly positive in this regard, the transition to secondary school was nevertheless associated with a shift in peer group and social circles.

When it comes to making new friends only 15% of children felt it was hard for them to do so (Table 9-2). This finding aligns with parent reports of children's experiences (Table 9-4), with 19% reporting that their child was anxious about making new friends at S1, and 69% reporting that their child was not anxious. Additionally, 95% agreed their child had made new friends in secondary school, while a large majority (72%) did not feel that their child missed their primary school friends. For most children, the transition to secondary school did not seem to be associated with significant concerns regarding peer groups, although this does appear to be a concerning aspect for a minority of children.

Figure 3-2 *Proportion of children who report 'never' being bullied in primary school (P6) and secondary school (S1).*



Note. P6 data drawn from GUS sweep 8 (Table 9-1), unweighted base: n=3,085. S1 data from sweep 9 (Table 9-2), unweighted base: n=3,021

Additionally, reports of bullying in primary and secondary indicated an overall positive trend, with a reduction in all forms of bullying being reported after children had started secondary school (Figure 3-2). After moving to secondary school, children were more likely to report never being bullied by being made fun of or called names, being left out of games, and being shoved, pushed or hit[23]. The smallest reduction, however, was

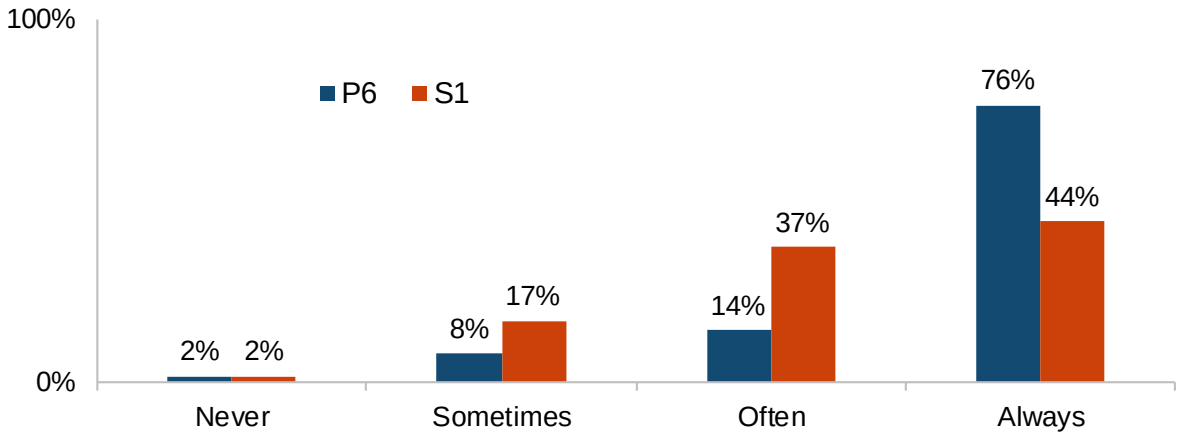
[23] *Respect for All* (Scottish Government, 2017) the Scottish Government's national approach to anti-

seen amongst reports of being called names and made fun of. This was also the most prevalent form of bullying both in primary and secondary school.

3.4. Relationship with teachers

Only one measure of teacher relationship is available in GUS – child reports of being treated fairly by teachers (Table 9-2). This variable was included at both sweep 8 and sweep 9, allowing for comparison between primary (measured in P6) and secondary school (measured in S1). As shown in Figure 3-3 the transition to secondary school was associated with a considerable decline in children perceiving they are 'always' being treated fairly by teachers.

Figure 3-3 *How often children feel their teachers treat them fairly in primary school (P6) and secondary school (S1).*



Note. P6 data drawn from GUS sweep 8 (Table 9-1), unweighted base: n=3,088. S1 data from sweep 9 (Table 9-2), unweighted based: n=3,282. Numbers indicate weighted percentages.

3.5. Learning

Aspects of learning in secondary school were measured using five questions, three asked of children and two asked of parents. The child questions asked how easy or difficult they found maths, how or easy or difficult they found English and how pressured they felt by the schoolwork they had to do. For parents, the questions used

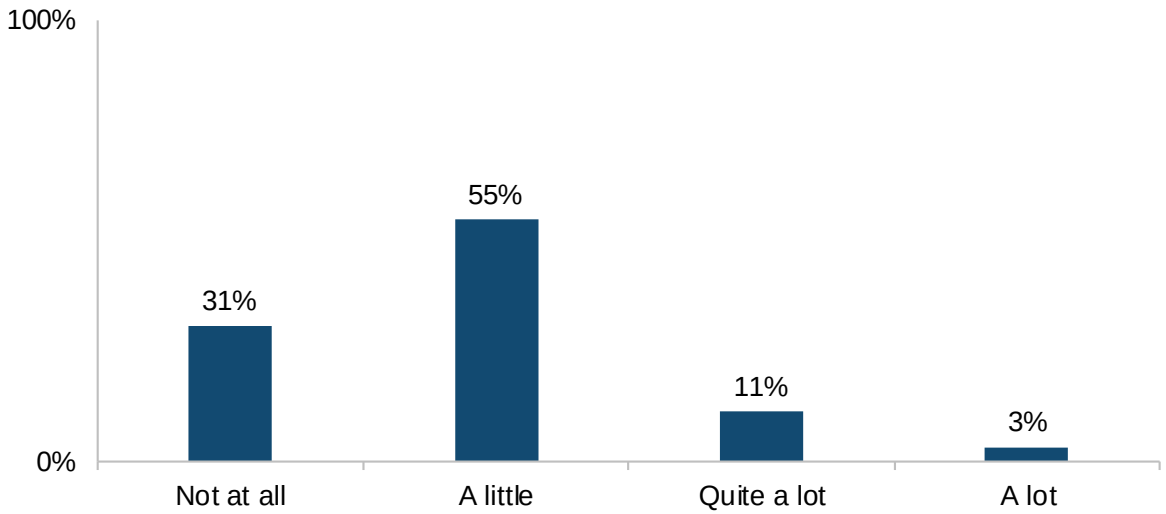
bullying defines bullying behaviour as including: being called names, teased, put down or threatened face to face/online; being hit, tripped, pushed or kicked; being ignored, left out or having rumours spread about you (face-to-face and/or online); having belongings taken or damaged; sending abusive messages, pictures or images on social media, online gaming platforms or phone; behaviour which makes people feel like they are not in control of themselves or their lives (face-to-face and/or online); being targeted because of who you are or who you are perceived to be (face to face and/or online). The measures used here cover the first three of these behaviours.

asked whether the extent to which they agreed or disagreed that their child received too much homework and that their child was coping well with school work.

Children predominantly felt that the level of difficulty in secondary school was appropriate, neither too hard or too easy, for both maths (78% of children) and English (79%) (Table 9-2). Additionally, there were relatively few child reports of feeling overly pressured by their schoolwork, with 14% of children feeling pressured 'quite a lot' or 'a lot' (see Figure 3-4).

Child reports were supported by parent reports regarding levels of school work. Overall, 7% of parents felt that their child received too much homework, while 90% felt that their child was coping well with their school work (Table 9-4).

Figure 3-4 *Whether child feels pressured by schoolwork in secondary school (S1)*.



Note. Data drawn from GUS sweep 9, unweighted base: n=3176. Numbers indicate weighted percentages.

3.6. Engagement and motivation

Engagement and motivation were measured using the following items from the data:

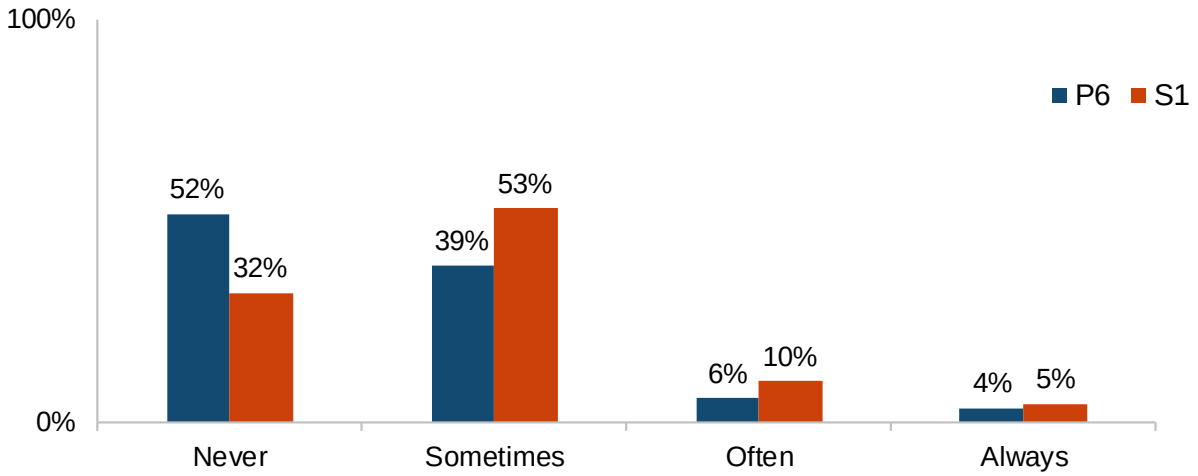
- I look forward to going to school
- I hate school
- How often do you try your best at school?
- How much do you like reading (P6)/How much do you like English (S1)?
- How much do you like doing number work (P6)/How much do you like maths (S1)?
- Have you ever skipped school when your parents didn't know even if only for a half day or a little while/single lesson?

- Whether school has been in contact with parent regarding child's behaviour, attendance etc.

Other than the last question which was asked of parents, all items were reported by the study child. Each question was included at both sweep 8 and sweep 9, allowing for comparison between primary (measured in P6) and secondary school (measured in S1).

Children at secondary school were more likely to report hating school (15% 'often' and 'always') (see Figure 3-5) and were less likely to look forward to going to school (46% 'never' and 'sometimes') (Table 9-2) compared to primary school (10% and 42% respectively)).

Figure 3-5 *How often child hates school in primary (P6) and secondary school (S1).*



Note. P6 data drawn from GUS sweep 8, unweighted base: n=3,087. S1 data drawn from sweep 9, unweighted base: n=3,283. Numbers indicate weighted percentages.

Similarly, children reported liking both English and maths less in secondary than they did in primary (Table 9-1), indicating that their decreased engagement and motivation related both to school generally as well as to subject specific aspects.

However, although children were slightly less likely to 'always' try their best after starting secondary school (62% reported this in P6, 57% in S1), they were just as likely to try their best 'most of the time' or 'always' (93% in P6, 93% in S1).

4 Factors associated with differences in experience of the transition to secondary school

4.1. Introduction

This chapter further explores differences in child transition experience using the overall transition measure derived in section 3.1. The proportions of positive, moderate and negative transition experiences are compared in relation to different demographic and socioeconomic characteristics, as well as in relation to other factors such as child expectations of the transition, involvement in sports, youth groups and other activities, family and peer networks, and school characteristics[24].

4.1.1. *Existing international research*

Previous international research has looked at differences in primary to secondary transition experiences in relation to a number of characteristics such as gender, ethnicity, socioeconomic factors and disabilities, as well as a host of other factors including children's expectations of the transition, homework, extra-curricular activities, peer and family relationships.

In terms of gender, in the USA, girls have been reported to do academically better than boys but also as having more difficulties with transitions due to anxiety; their grades have also been found to decline more rapidly later (Benner & Graham, 2009). However, in another study, Benner et al. (2017) found that boys were more likely to develop depressive symptoms across secondary school transitions.

In relation to ethnicity, Benner and Graham (2009) found that, rather than ethnicity having an impact per se, the African American and Latino students in their study found transitions difficult if they moved to secondary schools with fewer children with the same ethnicity as them.

Existing studies have suggested that socioeconomic status seems to have an impact on educational outcomes, with increased prevalence of difficulties during the transition

[24] Results are shown in Table 9-5.

process amongst less advantaged children (Benner & Graham, 2009; Benner et al., 2017; Burchinal et al., 2008; Serbin et al., 2013).

Additional Support for Learning legislation in Scotland (Scottish Government, 2004) places specific duties on local authorities in Scotland, with clear timescales for transition planning and practice for children and young people identified as having additional support needs. This reflects a range of research which has found that having additional support needs prior to transition is a risk factor for negative transition experiences, including for children with Autism Spectrum Disorders (ASD, Hannah & Topping, 2012, 2013) and English as an Additional Language (EAL, Bailey & Baine, 2012). Notably, most of these studies focussed only on children with specific support needs, rather than studying *differential* impacts of transitions. That is, few studies have compared transitions of children who have additional support needs with those who do not.

Children's expectations of the transition experience seem to be linked to their actual transition experience; in Australia Waters et al's (2014a) study found that, those who had a positive expectation of the transition were three times more likely to have a positive transition. Similarly, in Scotland, Jindal-Snape and Cantali (2019), although with a smaller sample size, found that those with positive expectations were almost three times less likely to experience problems with transitions.

Ganeson and Ehrich (2009) found that there were competing demands of homework from several teachers, which children found to be problematic. Similarly, in England, Symonds and Hargreaves (2016) found that children were concerned about the amount of homework they were given, rather than about the difficulty level, and this led to disengagement and a reduction in positive attitudes towards secondary school.

Some studies have found that children were excited about the opportunities of joining a diverse range of activities and clubs (Jindal-Snape & Cantali, 2019; Jindal-Snape & Foggie, 2008). Involvement in sports, youth groups and other activities can provide additional opportunities for developing social networks and has been seen to be one way of promoting self-esteem and developing resilience during transitions (Newman & Blackburn, 2002).

Existing international research also suggests that when parents were involved in the transition process, this had a positive impact on the child's transition (Davis et al., 2015). Conversely, a lack of participation by parents and other stakeholders has been found to be detrimental to effective transition practice (Lubbers et al., 2008).

Family relationships have been found to be more important during transitions than relationships with teachers and classmates, and any other factors (Benner & Graham, 2009; Waters et al., 2014b). Those with a close relationship with their parents have been found to be more likely to have a relatively positive transition (Waters et al., 2014b) and higher level of academic motivation (Frey et al., 2009). Based on existing

international research, important family-related factors for positive primary-secondary transitions include: a stable home environment (Hammond, 2016); consistent and ongoing support from parents (Smith et al., 2008; Waters et al., 2014b); engaged parents (Hammond, 2016); and having an older sibling already attending the secondary school (Mackenzie et al., 2012).

Peer networks have been found to have an impact on positive or negative transition outcomes, including aspects such as the level of peer acceptance and existing number and quality of friendships before moving to secondary school (Kingery et al., 2011; Waters et al., 2014b). Good peer relationships have been found to act as a protective factor – helping children manage difficulties related to transition (e.g. Hammond, 2016; Tso & Strnadova, 2017) – and to have contributed to academic achievement (Kingery et al., 2011). Unsurprisingly, lower levels of bullying in secondary schools have also been found to also be a positive factor (Farmer et al., 2011). Even so, most studies appear to highlight the difficulties related to forming relationships with new peers and concerns about losing primary school friends during transitions (Hammond, 2016); something which has been found to be especially difficult for children with special educational needs[25] (for instance, from Ireland Scanlon et al., 2016).

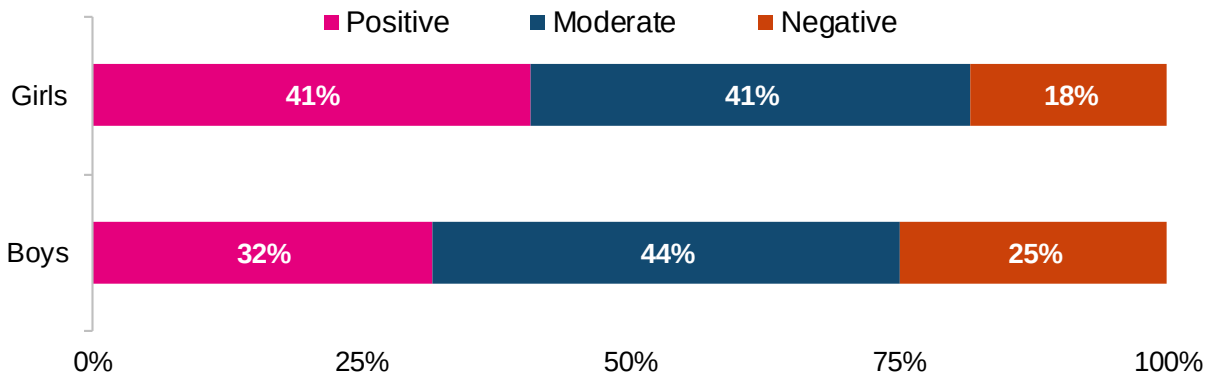
4.2. Experience of transition by demographic factors

In the following we outline our findings comparing the overall transition experience according to demographics such as gender, household status and socioeconomic status and area characteristics.

[25] The terminology used by Scanlon et al. from Republic of Ireland is SEN which included Mild General Learning Disability (MGLD; N = 6); Moderate Learning Disability (MoGLD; N = 2); Emotional and Behavioural Disability (EBD; N = 1); Hearing Impairment (N = 2); Multiple Disabilities (N = 17); Assessed Syndrome (N = 7); Physical Disability (N = 1); and Specific Learning Disability (SLD; N = 5).

4.2.1. *Child demographics*

Figure 4-1 *Transition experience by gender*



Note. Data drawn from GUS sweeps 8 and 9. Unweighted base; boys, n=1,183; girls, n=1,175. Percentages are weighted.

As shown in Figure 4-1, boys were less likely than girls to experience a positive transition to S1, with a nine-percentage point difference between genders and more likely to experience a negative one (a seven-percentage point difference). The difference between boys and girls experiencing moderately-positive transition was not statistically significant.

Exploring differences in transition by other demographic variables reveals some association with religion. Protestant and other non-Catholic Christian children were more likely to have a positive transition (41%) compared with non-religious children (35%) and were less likely to have a negative transition (non-Catholic Christians 17%, non-religious 23%). The survey data suggests that slight differences might exist in regard to ethnicity – the survey recorded a smaller proportion of children who are white experiencing a positive transition (36%) compared to children from other ethnic backgrounds (42%). However, it is difficult to draw a definitive conclusion as this difference was not statistically significant.

4.2.2. *Household composition*

Exploring the relationship between household composition and experience of transition revealed differences for both the presence of an older sibling in the household and for single parent status.

Children from single parent households were more likely to have a negative transition (28%) than children from couple family households (20%), while children with older siblings were also more likely to have a negative transition (24%) than children with no

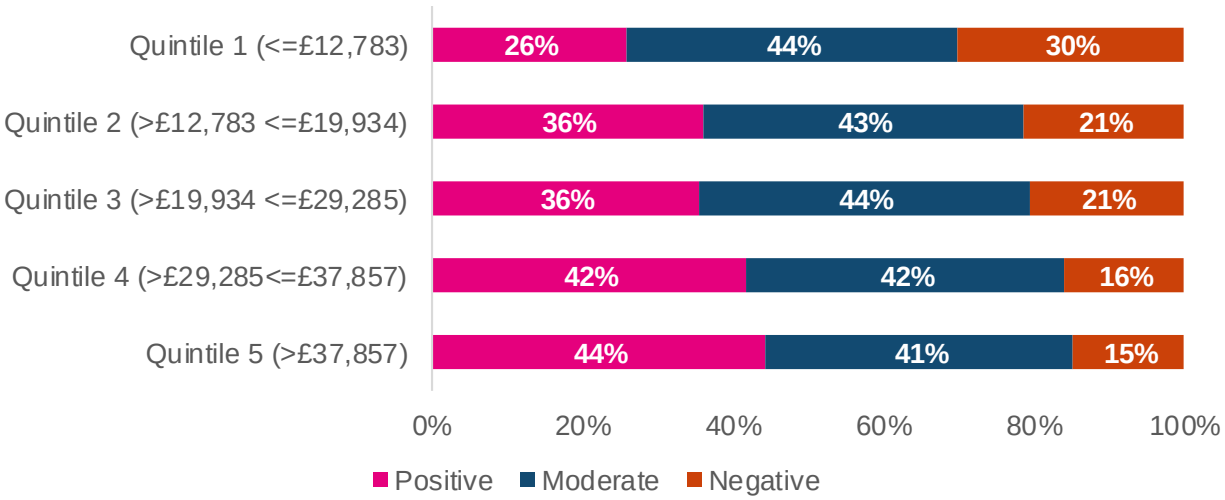
older siblings (19%)[26]. Neither of these factors were associated with differences in positive or moderate transitions.

4.2.3. *Socioeconomic status and area characteristics*

A clear pattern emerged in regard to socioeconomic status and disadvantage. Equivalised household income (Figure 4-2), area deprivation and highest parental education level were all strongly associated with child experience of transition. The proportion of children reporting a negative transition increased across all three measures as the level of disadvantage increased, while the prevalence of positive transitions decreased. No relationship was found between whether schools were urban or rural and transition experience.

Comparing the most and least disadvantaged, the greatest difference in the proportion of children reporting a positive transition was seen in relation to equivalised household income. For those in the top income quintile, 44% had a positive transition to secondary school. For those in the bottom quintile, however, there was a 19-percentage point difference, with 26% having had a positive transition.

Figure 4-2 *Transition experience by equivalised household income*



Note. Data drawn from GUS sweeps 8 and 9. Unweighted base: n=2,385. Percentages are weighted.

Parental education was a more salient predictor of experience amongst children who had a negative transition than a positive one. Amongst children whose parents had no

[26] Note that, due to the banding of age categories in the dataset, in the primary school data it was not possible to identify older siblings who were under 12 years old. Therefore, the data on older siblings here refer to siblings who were aged 12 or over.

qualifications, 44% had a negative transition experience and 30% had a positive transition experience compared with 16% and 42% respectively of those whose parents were degree educated.

4.3. Experience of transition by other influencing factors

The following sections outline findings comparing the overall transition experience according to factors including additional support needs, children's expectations of the transition, their experience of homework, engagement in sports, youth groups and other activities, parent-school communication, peer and family relationships and school characteristics.

4.3.1. *Additional support needs*

Transition experience was related to whether or not a child had any additional support needs[27]. Overall, children with additional support needs were less likely to have a positive transition and more likely to have a negative transition than their peers who did not have any additional support needs. Of those who had additional support needs at either of the time points considered, 26% experienced a positive and 32% a negative transition. This compares with 39% and 19% respectively, of children with no additional support needs.

4.3.2. *Child expectations of transition*

Children's anticipated experience of secondary school was largely in line with their transition outcome. For those who reported looking forward to starting secondary school 'a lot', 44% had a positive transition. In comparison, 14% of those who were not looking forward to secondary school 'at all' had a positive transition. In regard to negative transitions, a similar pattern was seen in reverse – 42% of children who were not looking forward to going to secondary school 'at all' have a negative transition, while the figure is 15% for those who were looking forward to this 'a lot'. However, for this question, children were asked to 'think back' to how they felt before they started S1 although they had in fact already started S1. Their experiences of S1 may therefore have biased their recollection of how they felt before starting secondary school.

Where children did not go to the secondary school of their choice, the likelihood of a negative transition was considerably higher. Overall, 40% of these children had a

[27] In addition to analysing transition experience by the presence of any additional support needs at S1, additional analyses were carried out to explore whether any new additional support needs being identified since P6 were associated with any additional differences in transition experience. However, the outcome of this analysis did not substantially differ from the findings reported for any existing additional support needs at S1.

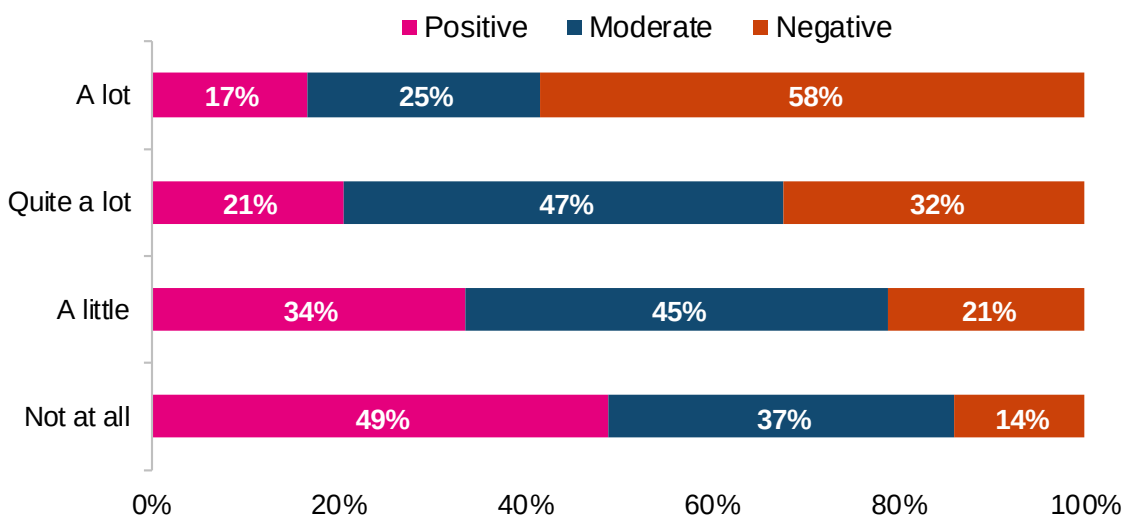
negative experience, compared with 20% who did attend the school of their choice. However, only a minority of children (5%) reported not attending their preferred school.

4.3.3. *Child experience of schoolwork*

As shown in Figure 4-3, the extent to which children feel pressured by the amount of schoolwork they are required to do in secondary school was strongly associated with transition experience. Only 14% of children who reported not feeling at all pressured their school work had a negative transition, compared with 58% of those felt pressured 'a lot'.

This finding was supported by parents' views of how well a child is coping with their schoolwork. The extent to which parents felt that their child was struggling is strongly correlated with children's own views of whether or not they are struggling, and with child-reported transition experience. For example, 45% of children whose parents strongly agreed that their child was coping with their schoolwork had a positive transition, while 14% of these children had a negative transition.

Figure 4-3 *Transition experience by how pressured child feels by schoolwork in secondary school (S1)*



Data drawn from GUS sweeps 8 and 9. Unweighted base: n=2,357. Percentages are weighted.

4.3.4. *Involvement in sports, youth groups and other activities*

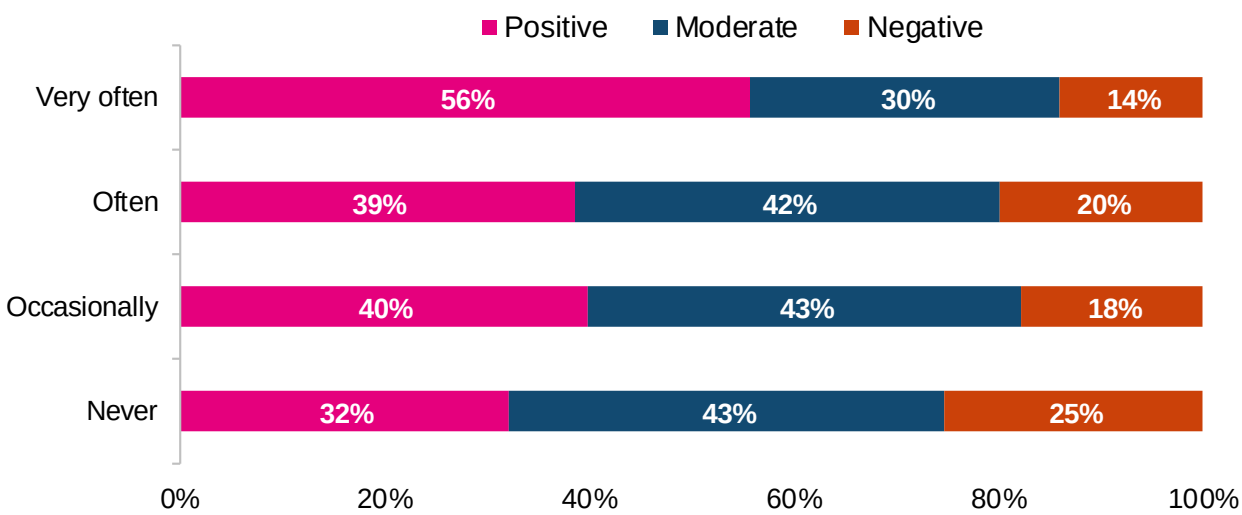
Children who regularly took part in sports, youth groups and other activities after starting secondary school were shown to be less likely to have a negative transition and more likely to have a positive transition. Overall, 20% of children who regularly took part in any form of such activities had a negative transition experience compared with 33% of those who did not (Table 8-5, whilst 37% of those who took part in

activities had a positive experience, compared with 30% of those who did not However, it is not possible to determine the causal nature of the relationship and it is possible that children are more likely to take part in these activities *because* they have had a positive transition, and vice versa.

4.3.5. *School communication and engagement*

Regular parent-school communication and engagement were strongly associated with transition experience. This was shown to be the case with both primary school and secondary school communication. As the frequency at which secondary schools had contacted parents to provide general school information or to ask them for the views on the school increased (Figure 4-4), the proportion of children having a positive transition increased.

Figure 4-4 *Transition experience by frequency of secondary school asking for parent views on school*



Note. Data drawn from GUS sweeps 8 and 9. Unweighted base: n=2,356. Percentages are weighted.

Furthermore, as parent-reported satisfaction with the support received at primary school increased, the proportion of children having a negative transition decreased. Of children whose parents were very satisfied with support from primary school, 19% had a negative transition, compared with 41% of those whose parents were not at all satisfied with the support they received (Table 9-5).

4.3.6. *Family relationships*

The quality of the parent-child relationship after children had started secondary school was associated with transition experience; 18% of children reporting a poor relationship with their parent had a positive transition, compared with 44% of children who had an excellent parent-child relationship (Table 9-5).

4.3.7. *Peer relationships*

Peer relationships at secondary school similarly displayed an association with transition. The ease at which children reported being able to make friends at secondary school was associated with positive transition - 39% of children who experienced a positive transition found it very easy to make new friends compared with 22% of children who experienced a negative transition. Finding it more difficult to make friends was less strongly associated with transition experience – 22% of those with a positive transition found it very difficult to make friends compared with 28% of those with a negative transition. Friendship quality (as assessed through a series of child reported measures such as 'my friends pay attention to me'[28]) was also shown to interact with transition quality - 37% of children who experienced a negative transition reported poor friendship quality compared with 26% who experienced a positive transition. However, unlike ease of making friends, this appears to be equally associated with both positive and negative transitions (Table 9-5)

4.3.8. *School characteristics*

School administrative data were incorporated into the analysis in order to assess whether school size and school location, in terms of urban-rural classification, were associated with transition experience. No relationship was found in regard to a school's urban or rural classification. However, associations were observed in relation to transitions between schools of different or similar sizes.

Those children who moved between a large primary to a large secondary school were the most likely to have a positive transition (40%). This was in contrast to those who moved between a small primary and a small secondary school – this was the group least likely to report a positive transition (28%). These children were, however, considerably more likely to report a moderate transition. The likelihood of experiencing a negative transition did not vary according to any combination of moves between large or small primary/secondary schools. Although a move from a small primary to a large secondary appeared to confer the greatest risk of a negative transition, this was not statistically significant and was possibly due to the lower sample sizes for this group (Table 9-5).

[28] See section 2.5 for details of how this measure was constructed.

5 The impact of the transition to secondary school on child and family outcomes

5.1. Introduction

Child development outcomes can be measured across a wide range of domains including physical and mental health, cognitive ability, educational attainment and social, emotional and behavioural development. These outcomes are represented across the four capacities of the Curriculum for Excellence (Scottish Government, 2008). Whilst the rich data collected in GUS allows consideration of the impact of transition on many of these developmental outcomes, this was not possible within the scope of this work (see section 2.2 for limitations to the analysis). Instead a single measure of the child's cognitive ability was selected. The measure of cognitive ability is based on direct assessments of the child carried out in a standardised manner with validated measures used widely by educational psychologists specially adapted for use on social surveys (see section 2.3 for further details). Cognitive assessments have been used repeatedly on GUS since the study children were three years old and the data they produce has been extensively analysed and reported on (for example see Bradshaw, 2011; Bradshaw et al, 2014; Bradshaw et al 2016; Klein and Kuhirt, 2016; Knudsen et al, 2017; Sim et al, 2019; Knudsen et al, 2019).The measure offers a high level of objectivity, providing a robust outcome for analysis. Furthermore, cognitive ability has been shown to be correlated with a range of other outcomes and may therefore also be considered as a useful proxy of the child's general developmental health (Law et al., 2017). Nevertheless, it is acknowledged (see project limitations in section 2.2) that cognitive ability may not represent the most appropriate outcome for consideration of the impact of primary to secondary transitions on all children. However, the study advisory group agreed it was the best available measure for the purposes of this report.

This chapter begins by describing the association between changes in child cognitive ability, family characteristics and the experience of transition to secondary school

The core child outcome selected for analysis is child cognitive ability – assessed through the WIAT-II Listening Comprehension subtest (conducted when the children were in their penultimate year of primary school, P6, and again when they were in their first year of secondary school, S1). Changes in cognitive ability are further analysed to examine whether family characteristics might explain some of the differences

observed in changes in cognitive scores during transition. Family outcomes related to parental working patterns and ability to meet costs of secondary school are then identified, with variation in outcomes being explored by socioeconomic and other characteristics.

5.1.1. *Existing international research*

Lofgran et al. (2015) highlight that children's cognitive ability increases as they move to secondary school, and this can enhance their academic and emotional abilities. Importantly, though, this increase is attributed to developmental reasons rather than being a result of the transition (Symonds & Hargreaves, 2016). In the main, existing international research in this area has focussed on educational outcomes rather than cognitive ability, with several studies highlighting a dip in attainment following transition to secondary school. However, only few studies quantify the proportion of children affected. One example is McIntosh et al. (2008) who found that one third of the children had poorer educational outcomes after they moved to secondary school. These findings are tentative, though, as poorer outcomes were measured by calculating how many pupils required additional support with their studies.

In terms of variations according to socioeconomic status, existing international research has suggested that children from socioeconomically disadvantaged backgrounds start secondary school with lower levels of cognitive ability, something which has also been found to be a predictor of lack of educational attainment and school dropout (for instance in Canada, Kingdon et al., 2017).

The conceptualisation of transitions based on MMT Theory (Jindal-Snape, 2016; 2018) – a conceptualisation which also underpins this study – highlights the importance of not only understanding the transitions of children but also the transitions they might have triggered for significant others such as their parents. Research undertaken with young adults with complex health conditions has pointed to changes in the working patterns of their parents and grandparents from an early stage of the children's life and school careers, including moves to part time employment or giving up work to become fulltime carers (Jindal-Snape et al., 2019).

5.2. Child cognitive ability

Notable (and statistically significant) differences between groups can be seen in children's cognitive ability score by their transition experience. These differences are illustrated in Figure 5-1. The average (median[29]) cognitive ability score for each of the three groups (those with a positive, moderate and negative transition experience, respectively) is represented by the horizontal line that divides the box into two parts.

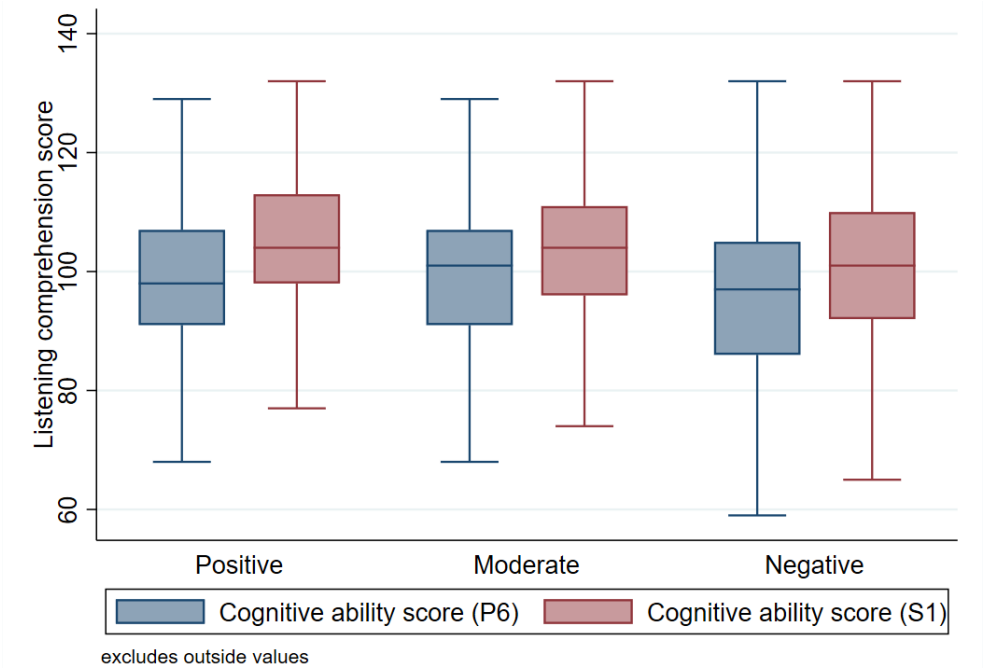
[29] The median score is the midpoint of the vocabulary scores recorded for the GUS children – i.e. half of the children will have recorded higher scores than this value, and half will have recorded lower scores than this value.

Half the scores are greater than or equal to this value and half are less. The box for each transition group represents the middle 50% of scores for that group of children. The boxes and median lines allow us to compare average ability across the children with different transition experiences.

The lines extending above and below the boxes – the upper and lower 'whiskers' – represent the range of scores outside the middle 50%. That is, the highest point of the top whisker for each group represents the highest score for children in that particular group while the lowest point of the bottom whisker represents the lowest score for children in that particular group. This allows us to consider variations in the full range of ability within each group (for example, differences within the group of children with a negative transition experience) and not just differences in average scores.

As can be seen in the chart, children who go on to have a negative transition showed the widest range of cognitive scores while they were still in primary school. Additionally, this group also had the lowest 25th, 50th and 75th percentile scores. For example, the median (50th percentile) cognitive score in P6 for children who experienced a negative transition was 97 compared with 101 and 98 for those with a moderate and positive transition respectively. Similarly, the P6 25th percentile score for children who experienced a negative transition was 86 compared with 91 for those experiencing a moderate or positive transition. This would therefore suggest that those who go on to have a negative transition are already at a disadvantage compared with their peers who go on to have positive and moderate transitions to secondary school. Given that a clear pattern emerged in the previous chapter (section 4.2) regarding socioeconomic status, this is perhaps unsurprising, and could be the result of lower socioeconomic status and increased disadvantage being associated with both lower test scores and an increased likelihood of having a negative transition.

Figure 5-1 *Cognitive ability scores in primary (P6) and secondary (S1) by transition experience*



Note. Data drawn from GUS sweeps 8 and 9. Unweighted base: P6 n=2,545; S1 n=2,550. Boxplots created using weighted data. Whiskers indicate minimum and maximum values. See further details in the text.

There was an increase in the average cognitive ability scores between primary and secondary school regardless of transition experience. However, a negative transition experience was associated with the smallest increase in scores (3.6 points on average), while the positive transition group had the largest increase in score (5.4 points on average, Table 9-6). Change in cognitive ability was also explored according to differences in a series of key demographic and other characteristics: gender, income, parent's level of education, urban/rural classification of child's home address, level of area deprivation of child's home address and Strengths and Difficulties Questionnaire (SDQ) score[30]. No statistically significant differences in increase in cognitive scores were found across these variables (Table 9-6).

To explore the increase in scores further and account for other factors that may be driving any differences between transition groups, the increase in cognitive ability

[30] SDQ is a screening tool for 3-16 year olds which assessed four psychological attributes: emotional, conduct, hyperactivity and peer relationship disorders behavioural problems. Scores were summed to derive a total score which was then grouped into three categories normal/typical (0 to 13), borderline (14-17) and abnormal/atypical (18 or more) (Goodman, 1997

score was analysed through a series of hierarchical regression models. Without initially controlling for any other characteristics, transition experience was shown to be related to changes in cognitive ability. However, when added to the model, none of the additional variables were found to have any statistically significant association with the change in cognitive ability measure. This is as may be expected given no statistically significant differences were found in the earlier bivariate analysis. In contrast, the transition experience variable maintained its statistical significance in every model. This therefore indicates that experience of transition has an independent association with change in cognitive score which is not explained by sociodemographic characteristics or socioemotional health.

5.3. Parental working patterns

The majority of parents (93%) reported no change to their working patterns once their child started secondary school (Table 9-8). Of the 7% who did report change, one third increased their hours and around a half had a different working pattern but the same amount of working hours.

Due to the small number of respondents who reported a change in their working patterns, there was a limited amount of data to be able to assess how work patterns changed by different family characteristics (Table 9-9). However, changes to parental working patterns did not vary significantly by having a child with additional support needs, while single parent families were equally as likely to have their work patterns affected by the child's transition as couple family households.

5.4. Meeting the costs of secondary school

The majority (86%) of parents reported some form of increase in school related costs as a result of their child starting secondary school (Table 9-11). These costs were most commonly related to school uniform, school lunches and school trips.

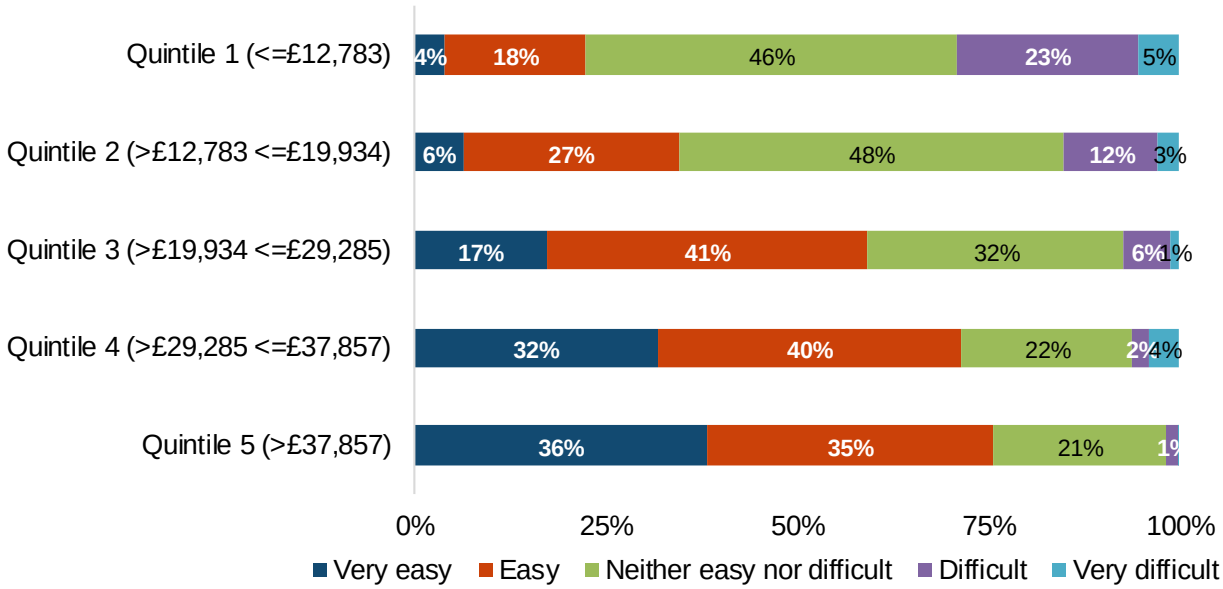
A weak association between income and increases in school costs was found, with lower income households being more likely to have additional school uniform costs (Table 9-13). 36% of parents in the top income quintile reported having these additional costs, compared with 62% of those in the bottom income quintile. Single parent households (47%) and households with a younger sibling (51%) were also more likely to report additional uniform costs.

A weak relationship was also apparent between income and additional costs relating to travel to and from school (Table 9-16). Overall, 21% in the bottom income quintile experienced extra travel costs at S1, compared with 15% in the top quintile. Similarly, 14% of households in the lowest deprivation quintile reported these costs compared to 26% in the most deprived quintile. Furthermore, 19% of non-rural households experienced additional travel costs compared with 10% of rural households. However,

no other patterns emerged regarding the likelihood of additional school costs and family or demographic characteristics.

Socioeconomic status was also associated with the ease of paying any costs associated with school (Table 9-22). This was the case for both household area disadvantage and equivalised household income (Figure 5-2). As socioeconomic status increased, parent-reported ease of paying any school costs also increased; 4% of those in the lowest income quintile found it 'very easy' compared with just 36% of those in the highest.

Figure 5-2 *Parent reported ease of paying school costs by equivalised income*



Note. Data drawn from GUS sweep 9. Unweighted base: n=3,017. Percentages are weighted.

6 Life events during the transition period

6.1. Introduction

This chapter explores the prevalence of developmental and life events experienced by children between primary and secondary school, as well as any associations between these events and changes in cognitive ability. Specifically, it examines experiences of upsetting life events, changes to family composition, friendship difficulties and the identification of having additional support needs shortly before and/or after moving to secondary school.

6.2. Prevalence of developmental and life events

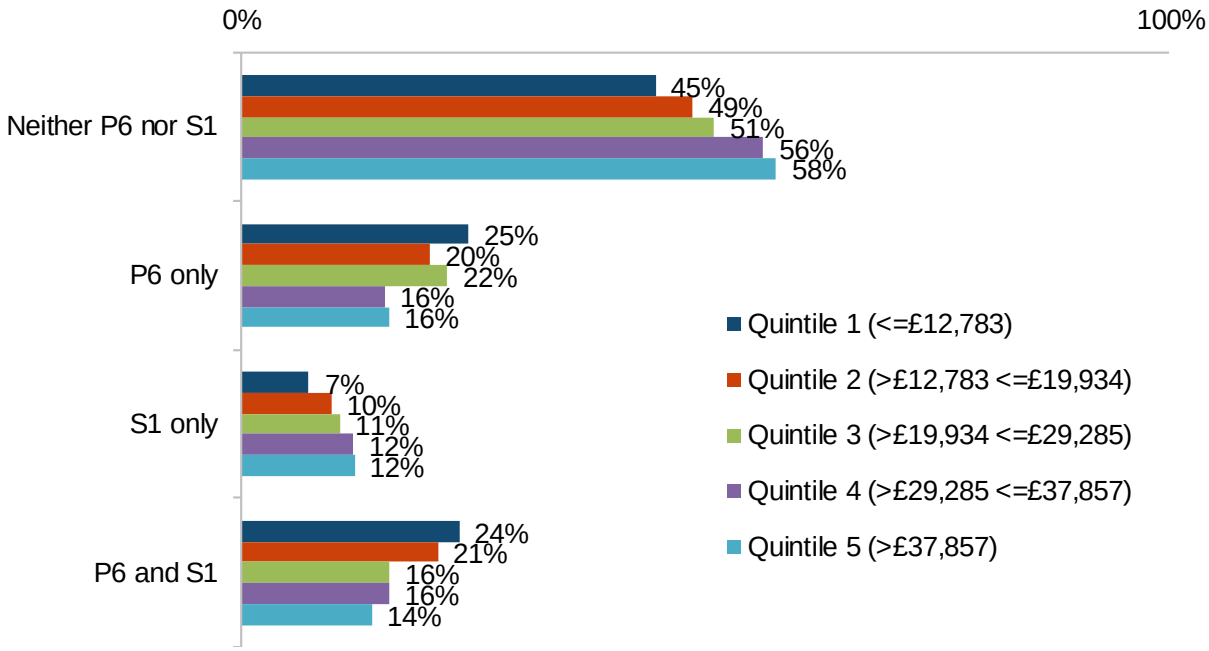
The overwhelming majority of parents (93%) did not report any changes in partnership status over the period considered; 5% of parents reported having separated and a further 3% had a new partner (Table 9-23). Higher area deprivation and lower household equivalised income were each associated with a greater likelihood of changes in partner status. These changes nevertheless only occurred for a minority of families across all groups, with 91% of those in the highest deprivation quintile reporting no change in status, compared with 96% in the lowest deprivation quintile. However, this difference was more pronounced in regard to income, with 83% in the bottom income quintile reporting no change in partner status compared with 99% in the top quintile. No differences were identified in regard to the child's gender or between rural and non-rural households.

The prevalence of bullying in primary and secondary school was also assessed (Table 9-24)[31]. Half of children reported being bullied in neither primary nor secondary school, while a fifth said that they were bullied at both time points. Bullying was more common in primary school (38%) than secondary school (28%) (Table 9-26). Children from households in the lowest income quintiles and the highest deprivation quintiles were the most likely to report being bullied in primary school and in both primary and secondary (Figure 6-1). A different pattern was seen, however, in the proportion of children who report being bullied in secondary school only. For this group, those in the top income quintiles were the most likely to report this being the case, with 12% of this

[31] The Scottish Government's national approach to anti-bullying – Respect for All (Scottish Government, 2017) – defines bullying as both the behaviour itself and its impact. The GUS questionnaire, finalised before the national strategy was published, measured only experience of bullying behaviour and not impact. In addition, not all behaviours included in the national strategy are covered by the GUS data.

group reporting being bullied only in secondary school, compared with 7% in the bottom quintile. Although the difference between groups in this case was relatively small, it nevertheless remains statistically significant. The same pattern was also apparent in regard to area deprivation.

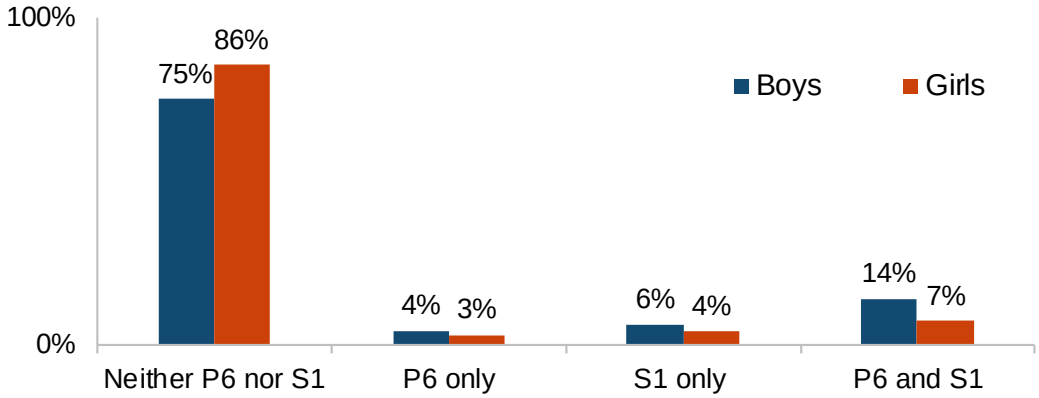
Figure 6-1 *Whether child bullied in primary (P6) and/or secondary school (S1) by household income.*



Note. Data drawn from GUS sweeps 8 and 9. Unweighted base: n=2,469. Numbers indicate weighted percentages.

At each sweep of GUS data collection parents were asked if their child had been identified by their school or another professional as having additional support needs. Where a child had previously been identified as having an additional support need, parents were asked whether or not the child still had this need (or needs, if more than one additional support need had been recorded), and whether the child had been identified as having any further additional support needs. In the penultimate year of primary school (P6), 14% of children had one or more additional support needs. Towards the end of their first year of secondary school, this figure was 15%. Overall, 20% of children had an additional support need at either P6 or S1 or both. Boys were more likely than girls to have additional support needs (25% compared with 14% among girls) (Table 9-25) (Figure 6-2).

Figure 6-2 *Proportion of children identified as having any additional support needs in primary (P6) and/or secondary school (S1), by gender.*



Note. Data drawn from GUS sweeps 8 and 9. Unweighted base: n=2,890. Numbers indicate weighted percentages.

Finally, the number of upsetting life events that had occurred between P6 and S1 were identified (see section 2.6.3). Just over half (54%) of children experienced one or more upsetting life event during this time (Table 9-27). For children who did experience at least one upsetting life event, the average number of upsetting life events experienced was 1.6. Gender differences were apparent, with 56% of girls having experienced one or more events over the transition period, compared with 52% of boys. Furthermore, as with the other events covered in this chapter, income and household deprivation were shown to be associated with upsetting life events. The greatest difference with respect to this was by income rather than area deprivation, with 67% of children from households in the bottom income quintile experiencing one or more upsetting life events compared with 44% of children in the top income quintile.

6.3. Developmental and life events, and cognitive ability

In order to explore the extent to which the events discussed in this chapter may influence any changes in cognitive ability score, the event measures were added to the full regression model as detailed in section 5.1.

Life events were not associated with the change in ability score and did not attenuate the association between transition experience and changes in cognitive development. This suggests that there is an independent association between changes in cognitive ability and the child's experience of transition to secondary school as measured by the motivation and engagement index[32].

[32] Note that an alternative analytical approach may produce different results.

7 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

7.1. Introduction

In this chapter we summarise and discuss the findings outlined in Chapters 3, 4, 5 and 6 and set out some recommendations for policy and practice. We also propose avenues for further research.

7.2. Experience of transition to secondary school

At an overall level – based on measures of children's motivation and engagement before and after moving to secondary school – just under four in ten (36%) children were characterised as having a positive transition experience, whilst 42% were characterised as having had a moderate transition experience. Thus, the majority of children had either a positive or a moderate transition experience – at least up until the point measured here, namely when they were in their second term of their first year of secondary school. Nevertheless, a significant minority, over one in five children (22%), experienced a negative transition.

As discussed in the introductory chapter to this report, the transition experience is made up of a number of different elements and in this study we examined a range of factors such as children's relationships with peers and teachers and academic matters. In the following we highlight and discuss the key findings in each of these areas.

The findings show that the majority of children moved to secondary schools with their primary school friends. Not all children chose to remain friends with their primary school friends, though, perhaps due to a wish to change their identities in the new educational setting and create new friendship groups (Farmer et al., 2011). Unlike what has been found elsewhere (e.g. Hammond, 2016), most children were confident about making new friends and overall had a positive peer-related transition experience. Notwithstanding that the measure of bullying used here does not fully encompass the definition set out in the Scottish Government's national strategy, the findings also show a reduction in bullying at secondary school, with less frequent reporting of 'being left out of games' and 'being shoved, pushed and hit' than in primary school.

Despite the vast majority of children reporting that they often or always felt treated fairly by their teachers both before and after moving to secondary school, the results showed a notable decline in the proportion of children who reported that their teachers

always treated them fairly. This may be explained to some extent by children's experience of moving from having just one teacher in primary school, with whom they had more time to build a relationship, to having multiple teachers in secondary school, with less time to build relationships. Nevertheless, a perception of lack of fairness from teachers may have a detrimental impact on child-teacher relationships. This is of concern given that having good relationships with teachers has been found to be highly predictive of positive student wellbeing (Wolters et al. 2012).

In terms of learning – in relation to English and maths specifically – children and parents reported that the level of difficulty in secondary school was neither too hard nor too easy. Furthermore, the majority of children felt only 'a little' or 'not at all' pressured by school work. Even so, children reported liking English and maths less at secondary school. Also, despite overall motivation to do their best at school remained high, similar to what has been found in previous research (Benner & Graham, 2009; Deieso & Fraser, 2018), children generally reported lower levels of enjoyment and engagement. This included more frequent reporting of things like hating school and not looking forward to going to school.

This presents a complex picture of children's transition experiences. Academic work in English and maths appeared to be at an appropriate level, however children appeared to be enjoying these subjects less. Similarly, with the findings showing a reduction in bullying in secondary school and most children finding it easy to make friends, why were children more likely to hate secondary school and less likely to want to go to school?

As data were collected during the second term of the children's first year of secondary school – at least five months after the move – these increases in negative experiences (or decreases in positive experiences) cannot wholly be attributed to the stresses of adapting to a new context, such as starting secondary school.

Furthermore, despite these increases in negative experiences – a worsening of teacher-child relationships, not liking English and maths, increase in hating school and not looking forward to going to school – the overwhelming majority of children at both time points reported positive engagement and motivation towards school. Therefore, the majority of children seemed to have an overall positive or at least moderate transition experience. Drawing on existing international research, it may be that good peer relationships (Hammond, 2016; Tso & Strnadova, 2017), a decline in bullying (Kingery et al., 2011) and the maintenance of high levels of overall motivation for school work acted as a buffer against the decline in relationships with teachers, the more negative attitudes towards English and maths and school in general, and the decline in engagement and enjoyment. It is also possible that there are other complex factors at play which were not considered here. For example, any changes in pedagogical approaches between primary and secondary, including the 'fit' of such approaches with children's developmental stage.

7.3. Factors associated with differences in experience of the transition to secondary school

Having understood more about the range of transition experiences, it is important to consider the factors that might have led to those different experiences, and how these experiences differ for different groups of children.

Our analysis showed notable differences in transition outcomes by levels of socioeconomic disadvantage. Children in the lower income groups were less likely to have positive and more likely to have negative transitions than those in the higher income groups. This was also the case in relation to area deprivation where children in the more deprived areas had poorer transition experiences than those in less deprived areas. Further, children whose parents had lower levels of educational qualifications were more likely to have a negative transition experience than those whose parents had higher levels of qualifications.

In terms of gender, girls tended to have more positive transitions than boys, with a higher proportion of boys experiencing negative transitions. Other studies that looked at educational outcomes found that girls tended to have good academic transitions but were more anxious during this period (Benner & Graham, 2009). Worryingly, Benner and colleagues' other research found that boys could develop depressive symptoms during the transition to secondary school (Benner et al., 2017). Therefore, further analysis of GUS data to explore the relationship between transition and wellbeing, as well as the relationship with gender, would be warranted, including looking at how these relationships may change as children move through secondary school.

In terms of family and household composition, a higher proportion of children from single parent households had a negative transition compared with children from couple family households. Contrary to previous research which found the presence of an older sibling to be a positive factor and a source of support during transitions (Jindal-Snape & Cantali, 2019; Mackenzie et al., 2012), in this study we found that children with an older sibling were, in fact, more likely to have a negative transition experience. Neither aspect of household composition was associated with differences in either positive or moderate transitions.

Previous research has not specifically looked at the relationship between family religion and transition experiences. In this study we saw some minor differences – non-Catholic Christian children had better transition experiences than children with no religious affiliation, although no link was found for other religions. In relation to ethnicity, contrary to previous research, there were some indications – although findings were not statistically significant – that children from a white background may be less likely to have had a positive transition than children from other ethnic backgrounds.

Similar to findings from existing research in Scotland and Australia (Jindal-Snape & Cantali, 2019; Waters et al., 2014a), children's anticipated experience of secondary school to a large extent matched their transition experiences: those who reported looking forward to starting secondary school 'a lot' had a more positive transition than those who were not looking forward to it 'at all'. However, it is not clear whether expectations led to reality or, rather, whether those who expected to have negative experiences were already experiencing problems before starting secondary school. In addition, as the question was asked retrospectively, children may not have accurately recalled how they felt ahead of their transition.

In terms of links with pressure by schoolwork, while most children did not report often feeling pressured by school work, those who felt pressured 'a lot' were more likely to experience a negative transition than those who did not feel pressured 'at all'.

Good parent-school communication and parents feeling supported by the primary and secondary school were both linked to positive transitions – this is similar to what has been found elsewhere (e.g. Davis et al., 2015). A good parent-child relationship – especially when the child had started secondary school – was also found to be positively associated with a positive transition experience. Again, this is similar to what has been found elsewhere (e.g. Benner & Graham, 2009; Waters et al., 2014b). Furthermore – and in line with research by findings by Hammond (2016) and by Tso and Strnadova (2017) – good peer relationships and ease of making friends also seemed to play a role in positive transition experiences. In addition, those who regularly took part in sports, youth groups and other activities at secondary school had a more positive transition experience than those who did not. This might be explained by Newman and Blackburn's (2002) assertion that such participation enhances self-esteem which in turn improves resilience.

Although only a minority of children did not go to a school of their choice, almost half of those had a negative transition experience. Whilst the reasons for this were not explored in this research, it is possible that those children who did not go to their preferred school were separated from their primary school friends and experienced uncertainty about secondary school for a period of time. If the secondary school was not part of their 'cluster', it is also possible that these children did not have access to the transition preparation for that school.

Existing international research has suggested that children with educational support needs (defined in different ways according to where the research was undertaken) are less likely to have a positive transition (Hannah & Topping, 2012, 2013; Mandy et al., 2016a, b; Peters & Brooks, 2016; Makin et al, 2017). In the main, these previous studies relied on small sample sizes and drew only on data collected from children with support needs – i.e. there was no comparison with children who did not have any support needs. In this study, drawing on data collected from a large sample of children with and without any additional support needs, we found that children with additional

support needs were less likely to have a positive transition and more likely to have a negative transition than their peers.

7.4. The impact of the transition to secondary school on child and family outcomes

Previous studies have highlighted that children's cognitive ability increases as they move to secondary school (Lofgran et al, 2015) and that this is a developmental change rather than something which occurs as a result of transitions (Symonds & Hargreaves, 2016). In this study, although cognitive ability increased for all children, children with negative transitions had relatively lower increases in cognitive ability compared with those with positive transitions. Further, contrary to previous research, we found that transition experience was independently associated with change in cognitive ability, after controlling for a range of social background and other key factors. Although we cannot say anything about the direction of cause and effect, this is nevertheless an important finding as it highlights where schools may be able to positively influence change. This could, for example, be through the adoption of a growth mindset[33] or by improving transition support, or both.

We were only able to ascertain one aspect of transitions for parents due to their child's transitions, namely the impact on parental working patterns. The vast majority of parents – including amongst those whose children had additional support needs – reported no changes to their working patterns as a result of their child starting secondary school. However, a majority of parents did report an increase in school related costs.

7.5. Life events during the transition period

Life events occurring alongside the primary to secondary transition may influence both the transition experience and other aspects of children's development, including their cognitive development. For example, it has been argued that a stable family environment is important for positive transitions (Hammond, 2016). In this research we attempted to understand the prevalence and potential impact of such life events on changes in the child's cognitive ability. The life events considered included changes to family composition, friendship difficulties (such as change in the experience of bullying)

Overwhelmingly, parents did not report any changes in partnership status over the period corresponding with the child's transition to secondary school. In terms of

[33] A growth mindset is a belief that children's abilities can be developed (Dweck, 2017). Teachers can develop it in several ways, such as emphasising the learning process rather than the result, creating time for children to reflect on their learning, supporting children to learn from their mistakes rather than seeing them as failures etc.

bullying, children were less likely to be bullied in secondary school than primary school. While half of children reported being bullied in both primary and secondary school, where bullying occurred at one time point only, this was more common in primary than secondary. Notably, children living in lower income households and in more deprived areas were more likely to be bullied than those in higher income household and those living in less deprived areas. Interestingly, amongst those who reported being bullied at secondary school only, a higher proportion were from higher income households.

Most children did not have any identified additional support needs in Primary 6 or S1. In Primary 6, 14% of children had one or more additional support need; towards the end of their first year of secondary school, this figure was 15%. Overall, 20% of children had an additional support need at either P6 or S1 or both.

Girls and children from socioeconomically less advantaged households tended to experience a higher number of other upsetting life events than boys and those in more advantaged socioeconomic circumstances, respectively.

None of these life events were found to be independently associated with a change in cognitive ability scores over the period considered, after other differences between children had been controlled for. Furthermore, there were no indications that they had any impact on the association between transition experience and changes in cognitive ability. This supports the previous finding that there appears to be an independent relationship between transition experience and changes in the child's cognitive ability, even when taking into account a range of other factors including various life events occurring alongside the transition.

7.6. Recommendations for policy and practice

In the above we have outlined and discussed some of the key findings of the research. Drawing on this, in the following we set out our recommendations for policy and practice.

At an overall level, the findings suggest that support for transition needs to acknowledge the myriad factors occurring alongside and potentially influencing a child's transition process. Where possible, schools and parents need to provide the support necessary to mitigate against negative impacts and ensure each child has a successful transition.

More specifically, the following may help improve children's transition experience:

- Similar to activities already being undertaken in relation to the Scottish Attainment Challenge, there may be benefit in targeting children from more socially disadvantaged backgrounds in order to provide more tailored transition support, in line with the requirements of the Additional Support for Learning Act, as our

research shows that socioeconomically disadvantaged children were more likely to have negative transitions than their more advantaged peers.

- Reflecting existing legislative requirements, children with additional support needs already receive individualised transition support, both in primary and secondary school. However, with some of these children continuing to report poorer transitions, there may be some benefit in a review of the mode and content of this transition support to better meet the needs of these children.
- Ensure steps are taken to promote positive relationships in children's first year at secondary school. Although secondary school teachers are already working towards developing positive relationships, they should be made aware that some children still perceive that they are not always fair towards them. A whole-school dialogue might be useful to ensure all staff and children have a shared understanding of expectations and rules.
- Children's recalled anticipated experience of secondary school was predictive of their transition experience. Therefore, addressing any anxieties and misconceptions about secondary school while children are still in primary school is important. This may include the use of enhanced transition to support more familiarization with the secondary school environment for children with identified higher levels of concern or anxiety.
- The decline in positive attitude towards English and maths between primary and secondary school was not accompanied by high levels of concerns about the difficulty level or pressure of associated class work. Therefore, it is important to identify what other factors are at play here so that schools can effectively meet the needs of their pupils. Further, it is important to review children's attitudes over time.
- Schools should continue to implement the national approach to anti-bullying in Scotland. Further, they should use their recording and monitoring information to inform local approaches to dealing effectively with incidents of bullying behaviour, and share good practices where bullying is less prevalent.
- Ensure that relevant activities – in particular, any activities related to the transition itself – are available and accessible to children, both at school and in the wider community.
- Foster and maintain good school-parent relationships, e.g. through timely and relevant communication. Also ensure that parents are fully informed and supported to help their child with the transition. Make parents aware of their importance during this time.
- Ensure transition practice is evidence based and incorporate pedagogical approaches that enhance children and young people's learning experience in school.

7.7. Recommendations for research

This research provides new, unique and important evidence to help understand primary to secondary transitions. It also raises a number of further questions and highlights areas for future research to cover, for example:

- Why are children from less advantaged socioeconomic background more likely to experience negative transitions, and what measures might be particularly useful to support these children?
- What might explain the relationship identified between children's transition experiences and changes in their cognitive ability? Ideally this also should include different/wider aspects of cognitive ability.
- Are the differences in transition experiences identified here inter-related with each other, and does this explain some of the relationships identified in this report (e.g. differences between boys and girls)?
- What are the reasons some children have negative expectations about secondary school and why are some children generally less positive about secondary school?
- What role does ethnicity play in the transition experience amongst children in Scotland?
- What role do siblings and other family members play in the transition experiences? In particular, what role does the age and gender of siblings play, and whether the sibling(s) attend the same school(s).
- What are the specific actions that can be taken to support improved transitions for children and young people with additional support needs?
- What transitions do parents experience alongside their child's transition, and, in particular, how might these relate to the parent-child relationship?
- How might other aspects of the child-teacher relationship (than how much children feel their teacher treats them fairly, as considered here) be related to the transition experience?

Notably, the GUS data allow for further analysis exploring many of these questions. In particular, GUS data would be useful for further exploring aspects around interrelationships between characteristics and experiences and how they relate to the transition experience, as well as differences in experiences between more and less disadvantaged children, and those with and without additional support needs, as well as boys and girls. GUS data also holds further details on the teacher-pupil relationship at primary school level, as well as a range of data on mental health and wellbeing for both the children and their parent(s).

In addition, while this research makes use of the most recent available GUS data, data are currently being collected at the time the GUS children are in their third year of secondary school (S3). Extending the analysis presented here with these additional

data will provide a powerful and much needed longitudinal consideration of children's primary to secondary transitions.

Finally, in terms of future data collection, for comparison purposes it would be useful if, in future studies, repeated engagement and motivation measures, such as those utilized in this research, were accompanied by direct questions about the transition experience. Ideally, transition measures should be included to cover extended periods of time.

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9 Appendices

Appendix A: Additional information on selected analysis variables

Quality of Parent-Child Relationship

Children were asked to respond to six statements for each parent or parent figure in their household and say whether the statement is 'always true', 'often true', 'sometimes true' or 'never true'. Responses were given a numeric value and (with a higher value indicating a higher quality relationship, e.g. 'always true'=4) and added together an average score for each child was then calculated, and these average scores were subsequently grouped into 'excellent, 'good' and 'poor'. An 'excellent' relationship score is equivalent to the child answering 'always true' in response to all six statements, while a 'poor' relationship score signals a response of 'sometimes true' or 'never true' across the six items. Measures were derived separately for P6 and S1 data.

Items used to assess parent-child relationship quality: '*My [parent] listens to what I have to say', 'I can count on my [parent] when I have a problem', 'I talk to my [parent] when I'm having a problem', 'If my [parent] knows something is bothering me, they ask me about it', 'I share my thoughts and feelings with my [parent]', 'My [parent] pays attention to me'.*

Friendship Quality

Friendship quality was similarly assessed using six child response items. Similar to the approach taken for the measure of parent-child relationship, responses were summed and grouped so that higher values indicated better quality relationships (e.g. 'always true'=4), with a maximum score of 24. This combined score was then divided into three groups: 'excellent' (scores of 22-24), 'good' (scores of 13-21) and 'poor' (scores up to and including 12).

Items used to assess friendship quality: *'My friends listen to what I have to say', 'I can count on my friends to help me when I have a problem', 'I talk to my friends when I am having a problem', 'If my friends know something is bothering me, they ask me about it', 'I share my thoughts and feelings with my friends', 'My friends pay attention to me'.*

Bullying

Child reports of bullying were collected in both P6 and S1. Three separate items were combined to create an overall indicator of bullying at both time points. Responses were 'never', 'every few months', 'about once a month', 'about once a week' and 'most days'. To create a single measure of bullying, each response option was given a

numeric value from 1 (never) to 5 (most days). The mean value across the three items was then taken. Mean scores of 2 or more were classified as bullying.

Items used to assess bullying asked children to report how often other children pick on you: 'by calling you names or making fun of you in a way that you don't like'; '…by leaving you out of games and chats' and '…by shoving, pushing, hitting or picking a fight with you'. A further item regarding experience of online bullying was included in the S1 questionnaire but was not included in the analysis because there was no corresponding P6 question.

School size

School size was derived separately for P6 and S1, based on school roll data. The school roll measure was divided into quartiles, and schools in the lowest quartile (the smallest 25% of schools) were characterised as 'small', schools which fell into the middle two quartiles (between the 25th and 75th centiles) were classified as 'medium', and schools which fell into the highest quartile (above the 75th centile, the largest 25% of schools) were classified as 'large'. The resulting classifications of school sizes were as denoted in the table below.

School type	No. of pupils
Small primary school	< 189
Medium primary school	189 to 364
Large primary school	> 364
Small secondary school	< 741
Medium secondary school	741 to 1159
Large secondary school	> 1159

Upsetting life events

The full list of upsetting life events and proportion of children experiencing them between P6 and S1 (weighted percentages, unweighted base=3,418) were as follows:

Upsetting life event	% of all children
eath of a parent	-
death of a sibling	1%
death of a grandparent of other close relative	2%
parent had serious illness or accident	6%
sibling had serious illness/accident	3%
grandparents separated/divorced	1%
other close relatives separated/divorced	3%
stay in foster home	-
drug taking/alcoholism in immediate family	2%
mental disorder in immediate family	5%
death of a pet	18%

Upsetting life event	% of all children
conflict between parents	6%
parents in trouble with police	1%
parent in prison	1%
parent lost job	4%
family experienced crime	2%
sibling in trouble with police	1%
child in trouble with police	1%
Other	6%
None of these	45%

Appendix B: Supporting tables

Table 9-1 *Sweep 8 child univariate descriptive statistics*

Variable		Percentage	N
Picked on by being called names or made fun of			3086
	Most days	11.0	
	About once a week	9.8	
	About once a month	7.1	
	Every few months	19.4	
	Never	52.6	
Picked on by being left out of games			3085
	Most days	9.5	
	About once a week	8.6	
	About once a month	7.1	
	Every few months	17.3	
	Never	57.5	
Picked on by being hit, pushed or shoved			3084
	Most days	6.2	
	About once a week	5.7	
	About once a month	5.2	
	Every few months	13.7	
	Never	69.2	
My teacher treats me fairly			3088
	Never	1.7	
	Sometimes	7.7	
	Often	14.2	
	Always	76.4	
I look forward to going to school			3088
	Never	6.5	
	Sometimes	35.6	
	Often	32.7	

Variable		Percentage	N
	Always	25.2	
I hate school			3087
	Never	51.7	
	Sometimes	38.8	
	Often	5.9	
	Always	3.6	
Skipped school			3088
	Yes	5.0	
	No	95.0	
How often tries best at school			3088
	All of the time	62.3	
	Most of the time	30.8	
	Some of the time	4.0	
	Never	2.8	
How much likes reading			3088
	A lot	50.6	
	A bit	40.9	
	Not at all	8.5	
How much likes doing number work			3088
	A lot	47.1	
	A bit	42.6	
	Not at all	10.3	

Source: GUS sweep 8, all children who responded. Figures indicate weighted percentages.

Table 9-2 *Sweep 9 univariate child descriptive statistics*

Variable		Percentage	N
How many of your friends from primary school are you still friendly with?			3177
	None	4.9	
	A few	31.7	
	Most	42.4	
	All	21.0	
How easy or hard to make new friends at secondary school			3171
	Very easy	36.5	
	Quite easy	48.5	
	Quite hard	11.9	
	Very hard	3.1	
Picked on by being called names or made fun of			3281
	Most days	9.7	
	About once a week	10.3	
	About once a month	7.0	

Variable	Percentage	N
Every few months	16.1	
Never	56.9	
Picked on by being left out of games		3281
Most days	5.2	
About once a week	5.3	
About once a month	4.6	
Every few months	11.9	
Never	73.1	
Picked on by being hit, pushed or shoved		3281
Most days	3.5	
About once a week	4.0	
About once a month	3.6	
Every few months	8.8	
Never	80.2	
How many friends from primary school are attending the same secondary school as you?		3177
None	6.1	
A few	10.8	
Most	39.8	
All	43.3	
My teacher treats me fairly		3282
Never	1.7	
Sometimes	17.0	
Often	37.1	
Always	44.2	
How would you describe the work in your maths class?		3176
The work is too easy for me	12.0	
The work is too hard for me	10.2	
The work is just right - not too hard or too easy	77.8	
How would you describe the work in your English class?		3178
The work is too easy for me	13.8	
The work is too hard for me	7.0	
The work is just right - not too hard or too easy	79.1	
How many hours do you usually spend doing homework in an average week?		3281
None	5.3	
Less than an hour	37.6	
1 hour to less than 3 hours	44.1	
3 hours to less than 5 hours	10.1	
5 hours to less than 10 hours	2.3	
10 or more hours	0.4	
How pressured do you feel by the schoolwork you have to do?		3176

Variable		Percentage	N
	Not at all	30.8	
	A little	54.8	
	Quite a lot	11.2	
	A lot	3.2	
I look forward to going to school			3283
	Never	10.8	
	Sometimes	35.1	
	Often	38.5	
	Always	15.5	
I hate school			3283
	Never	32.2	
	Sometimes	53.0	
	Often	10.1	
	Always	4.7	
Skipped school since starting S1			3177
	Yes	6.3	
	No	93.7	
How often tries best at school			3282
	Never	0.5	
	Sometimes	7.0	
	Often	35.8	
	Always	56.7	
How much do you like English?			3283
	A lot	39.0	
	A little	49.2	
	Not at all	11.8	
How much do you like maths?			3283
	A lot	35.8	
	A little	43.6	
	Not at all	20.6	

Source: GUS sweep 9, all children who responded. Figures indicate weighted percentages.

Table 9-3 *Sweep 8 parent univariate descriptive statistics*

Variable	Percentage	N
Parent contacted by child's school		3142
Because of behaviour of other pupils towards child	6.4	
Because of their behaviour at school	7.4	
Because of their attendance at school	0.9	
Because of their attitude towards school	3.1	
None of these reasons	86.9	

Source: GUS sweep 8, all parents who responded. Figures indicate weighted percentages.

Table 9-4 *Sweep 9 parent univariate descriptive statistics*

Variable	Percentage	N
Child has made new friends		3293
Strongly agree	46.5	
Agree	48.1	
Neither agree nor disagree	3.2	
Disagree	1.8	
Strongly disagree	0.4	
Child misses old friends from primary school		3291
Strongly agree	2.9	
Agree	13.0	
Neither agree nor disagree	12.4	
Disagree	46.3	
Strongly disagree	25.4	
Child is anxious about making new friends		3294
Strongly agree	4.3	
Agree	15.1	
Neither agree nor disagree	12.1	
Disagree	42.2	
Strongly disagree	26.3	
Child is coping well with schoolwork		3294
Strongly agree	42.2	
Agree	47.6	
Neither agree nor disagree	5.9	
Disagree	3.2	
Strongly disagree	1.1	
Child gets too much homework		3289
Strongly agree	1.2	
Agree	5.6	
Neither agree nor disagree	20.6	
Disagree	56.9	
Strongly disagree	15.6	
Parent contacted by child's school		3295
Because of behaviour of other pupils towards child	11.1	
Because of their behaviour at school	10.4	
Because of their attendance at school	6.1	
Because of their attitude towards school	5.3	
None of these reasons	77.0	

Source: GUS sweep 9, all parents who responded. Figures indicate weighted percentages.

Table 9-5 *Child transition experience by selected sociodemographic, parental and school-related characteristics*

Covariate	Transition experience			N
	Positive	Moderate	Negative	
ALL	36.1	42.3	21.6	2,357
Gender				
Male	31.6	43.5	24.9	1183
Female	40.7	41.0	18.3	1175
Ethnicity				
White	35.9	42.5	21.6	2272
Other ethnic background	42.1	35.9	22.0	84
Religion				
No Religion	34.5	42.1	23.4	1355
Christian - Protestant or other non-Catholic	40.9	42.4	16.7	584
Roman Catholic	34.6	44.8	20.7	347
Other non-Christian	42.2	33.5	24.3	71
Single parent status				
Single Parent	31.1	40.9	28.0	412
Couple Family	37.6	42.7	19.7	1946
Presence of older sibling in household				
No older siblings	39.0	42.2	18.8	1208
Has older siblings	33.7	42.2	24.0	1057
Household equivalised income				
Bottom Quintile	25.9	43.9	30.2	335
Quintile 2	36.0	42.6	21.3	382
Quintile 3	35.5	43.9	20.5	510
Quintile 4	41.9	42.2	15.9	478
Top Quintile	44.4	40.9	14.7	497
Parent highest education level				
No qualification	29.9	25.9	44.2	66
Other	*	*	*	*
Lower level Standard Grades and Vocational qualifications	34.9	35.0	30.0	57
Upper level Standard Grades and Intermediate Vocational qualifications	26.2	48.9	25.0	323
Higher grades and Upper level vocational qualifications	34.6	42.6	22.8	728
Degree level academic and vocational qualifications	42.4	42.2	15.5	1174
Area deprivation				
Quintile 5 – most deprived	28.8	43.4	27.8	278
Quintile 4	31.8	42.6	25.6	379
Quintile 3	37.0	42.1	21.0	463
Quintile 2	37.9	43.0	19.2	623
Quintile 1 – least deprived	44.7	40.4	14.9	615

Covariate	Transition experience			N
	Positive	Moderate	Negative	
Home address locality				
Not rural	35.9	42.1	22.0	1711
Rural	36.8	42.9	20.3	647
Secondary school provided general school information				
Never	27.2	37.3	35.5	288
Occasionally	37.9	43.3	18.8	892
Often	35.3	45.7	19.1	826
Very often	42.9	36.5	20.7	351
(Can't remember)	*	*	*	*
Secondary school asked for parent views on school				
Never	32.2	42.6	25.2	1106
Occasionally	39.8	42.5	17.7	1010
Often	38.5	41.6	19.8	205
Very often	55.8	30.3	13.9	35
(Can't remember)	*	*	*	*
Satisfaction with support from primary school				
Very satisfied	38.7	42.1	19.2	1590
Fairly satisfied	32.1	43.6	24.4	613
Fairly unsatisfied	25.1	46.1	28.8	105
Very unsatisfied	31.9	26.8	41.3	48
Satisfaction with support from secondary school				
Very satisfied	39.8	43.1	17.1	1610
Fairly satisfied	29.4	42.4	28.2	641
Fairly unsatisfied	21.8	34.1	44.1	77
Very unsatisfied	40.9	24.3	34.8	27
Primary to secondary school size transition				
Small - small	28.2	50.9	20.9	201
Small - average	39.5	40.5	20.0	259
Small - large	37.4	31.0	31.6	74
Average - small	39.0	38.0	23.0	249
Average - average	34.1	42.4	23.5	514
Average - large	34.9	44.6	20.4	279
Large - small	31.3	47.1	21.5	67
Large - average	39.3	41.2	19.5	273
Large - large	40.0	38.9	21.1	200
Primary school locality				
Rural	35.4	43.7	21.0	752
Urban	36.6	41.3	22.1	1404
Secondary school locality				
Rural	36.5	44.5	19.0	640
Urban	36.0	41.0	23.0	1476

Covariate	Transition experience			N
	Positive	Moderate	Negative	
Transition in rurality of school location from P6 to S1				
Rural to rural	36.4	44.1	19.5	537
Rural to urban	33.3	42.2	24.5	205
Urban to rural	37.6	46.8	15.6	102
Urban to urban	36.3	40.9	22.8	1269
My teacher treats me fairly (S1)				
Never	12.3	28.0	59.7	36
Sometimes	16.1	39.6	44.3	361
Often	32.3	47.3	20.4	901
Always	47.8	39.8	12.4	1059
Whether the child had been looking forward to secondary school (S1)				
A lot	44.4	40.9	14.7	841
Quite a lot	36.5	42.5	21.1	1055
Not very much	23.6	44.1	32.3	374
Not at all	13.8	44.3	41.9	87
Whether going to secondary school of choice				
Yes	37.2	42.1	20.7	2253
No	14.9	44.5	40.7	102
Child coping well with school work (parent report)				
Strongly agree	44.6	41.9	13.5	1035
Agree	33.4	43.9	22.7	1126
Neither agree nor disagree	20.5	41.0	38.5	113
Disagree	11.7	36.3	51.9	69
Strongly disagree	*	*	*	*
How pressured child feels by secondary school work				
Not at all	49.0	37.0	14.0	732
A little	33.6	45.2	21.2	1287
Quite a lot	20.6	47.2	32.2	269
A lot	16.6	25.0	58.3	69
Quality of parent-child relationship at P6				
Poor	29.1	37.5	33.4	206
Good	37.6	41.8	20.7	1308
Excellent	35.5	44.7	19.9	842
Quality of parent-child relationship at S1				
Poor	18.3	42.3	39.4	296
Good	33.6	44.9	21.4	1019
Excellent	44.4	39.5	16.0	1041
Quality of child friendships (S1)				
Poor	25.6	37.5	36.9	201
Good	32.7	44.9	22.3	1389

Covariate		Transition experience			N
		Positive	Moderate	Negative	
	Excellent	44.9	39.1	15.9	767
How easy to make new friends (S1)					
	Very easy	39.3	38.7	22.0	879
	Quite easy	37.1	44.7	18.1	1144
	Quite hard	26.9	40.8	32.3	263
	Very hard	21.6	50.3	28.1	68
Number of primary school friends attending same secondary					
	None	35.4	39.5	25.0	135
	A few	34.0	39.8	26.1	227
	Most	32.4	45.1	22.5	913
	All	40.1	40.7	19.3	1082
Child participates in groups/clubs (S1)					
	No	30.2	36.7	33.1	207
	Yes	36.9	43.0	20.0	2151
Child has any additional support need(s) at P6 (new and pre-existing)					
	No	37.9	42.2	19.9	2064
	Yes	25.2	42.4	32.4	293
Child has any additional support need(s) at S1 (new and pre-existing)					
	No	38.3	42.5	19.2	2049
	Yes	24.6	40.7	34.6	307
Child has any additional support need(s) at P6 and/or S1 (new and pre-existing)					
	No	38.5	42.2	19.2	1958
	Yes	25.9	42.4	31.7	400

Source: GUS sweeps 8 and 9 where child responded at both sweeps. Figures indicate weighted percentages. * No estimate(s) provided due to low base size.

Table 9-6 *Change in child cognitive ability score by socioeconomic and demographic characteristics*

Covariate	Covariate category	Mean change in cognitive score
Transition	Positive †	5.4 [4.5,6.2]
	Moderate	**3.9 [3.1,4.8]***
	Negative	**3.6 [2.2,5.1]***
Gender	Male †	4.8 [3.9,5.6]
	Female	4.1 [3.3,4.8]
Equivalised income	Bottom Quintile (<=£12,782.53) †	4.3 [2.8,5.8]
	2nd Quintile (>£12,782.53 <=£19,934.31)	4.2 [2.9,5.6]
	3rd Quintile (>£19,934.31<=£29,285.36)	4.4 [3.3,5.5]
	4th Quintile (>£29,285.36<=£37,856.79)	4.2 [3.1,5.2]
	Top Quintile (>£37,856.79)	4.9 [4.0,5.9]
Parent education	No qualification †	6.3 [2.3,10.3]
	Other	10.4 [5.7,15.1]
	Lower level Standard Grades and Vocational qualifications	5.1 [1.2,9.0]
	Upper level Standard Grades and Intermediate Vocational qualifications	4.3 [2.7,5.9]
	Higher grades and Upper level vocational qualifications	3.6 [2.6,4.6]
	Degree level academic and vocational qualifications	4.7 [4.1,5.4]
Area deprivation	Quintile 5 – most deprived †	5.0 [3.4,6.6]
	Quintile 4	4.6 [3.2,6.0]
	Quintile 3	4.2 [3.0,5.5]
	Quintile 2	4.4 [3.3,5.5]
	Quintile 1 – least deprived	4.0 [3.1,4.9]
Rurality	Not rural †	4.4 [3.8,5.0]
	Rural	4.4 [3.4,5.5]
SDQ	Normal †	4.4 [3.8,5.0]
	Borderline	3.6 [1.4,5.8]
	Abnormal	5.1 [2.8,7.3]

Note. Figures outside parentheses indicate mean change scores, figures inside parenthesis indicate confidence intervals. Source: GUS sweeps 1, 8 and 9, all children/parents who responded where child responded at both sweep 8 and 9. *p<0.05; † reference category.

Table 9-7 *Linear regression model of changes in cognitive ability between P6 and S1 by socioeconomic, demographic and socioemotional factors.*

Transition							
Moderate	**-1.41***	-1.48*	-1.49*	-1.41*	-1.45*	-1.45*	-1.48*
	[-2.55,-0.27]	[-2.63,-0.34]	[-2.63,-0.35]	[-2.54,-0.27]	[-2.58,-0.31]	[-2.58,-0.31]	[-2.63,-0.34]
Negative	**-1.74***	-1.87*	-1.87*	-1.88*	-1.93*	-1.94*	-2.07*
	[-3.41,-0.07]	[-3.54,-0.20]	[-3.56,-0.18]	[-3.54,-0.21]	[-3.59,-0.27]	[-3.60,-0.28]	[-3.72,-0.42]
Gender							
Female		-0.87	-0.89	-0.91	-0.94	-0.94	-0.89
		[-1.96,0.22]	[-1.99,0.20]	[-2.01,0.18]	[-2.03,0.15]	[-2.03,0.16]	[-1.98,0.21]
Equivalised income							
Quintile 2			-0.3	-0.03	0.07	0.07	0.08
			[-2.32,1.72]	[-2.12,2.06]	[-2.01,2.15]	[-2.01,2.15]	[-2.00,2.17]
Quintile 3			-0.17	0.16	0.34	0.35	0.39
			[-2.04,1.71]	[-1.80,2.12]	[-1.63,2.31]	[-1.62,2.32]	[-1.59,2.37]
Quintile 4			-0.47	-0.22	0.13	0.13	0.2
			[-2.31,1.37]	[-2.26,1.81]	[-1.94,2.20]	[-1.94,2.20]	[-1.89,2.28]
Top income quintile			0.29	0.52	0.94	0.95	1.02
			[-1.48,2.06]	[-1.42,2.45]	[-1.06,2.93]	[-1.05,2.96]	[-1.01,3.05]
Parent education							
Other qualification				3.29	3.24	3.25	3.24
				[-2.85,9.43]	[-2.99,9.48]	[-2.98,9.48]	[-2.94,9.43]
Lower level Standard Grades and Vocational qualifications				-1.39	-1.29	-1.28	-1.32
				[-6.98,4.20]	[-6.88,4.30]	[-6.88,4.31]	[-6.93,4.30]
Upper level Standard Grades and Intermediate				-2.17	-2.01	-2.02	-2.09

Vocational qualifications							
				[-6.54,2.20]	[-6.39,2.37]	[-6.40,2.36]	[-6.47,2.29]
Higher grades and Upper level vocational qualifications				-2.98	-2.77	-2.76	-2.76
				[-7.25,1.30]	[-7.06,1.53]	[-7.05,1.53]	[-7.07,1.55]
Degree level academic and vocational qualifications				-2.09	-1.76	-1.77	-1.79
				[-6.39,2.20]	[-6.08,2.55]	[-6.08,2.55]	[-6.11,2.54]
Deprivation							
Quintile 2					0.64	0.6	0.54
					[-0.73,2.02]	[-0.86,2.05]	[-0.91,2.00]
Quintile 3					0.56	0.52	0.47
					[-0.99,2.10]	[-1.05,2.09]	[-1.09,2.03]
Quintile 4					1.07	1.08	1.07
					[-0.61,2.75]	[-0.61,2.76]	[-0.61,2.76]
Quintile 5 – most deprived					1.47	1.5	1.49
					[-0.53,3.48]	[-0.51,3.52]	[-0.52,3.50]
Rurality							
Rural						0.18	0.21
						[-1.17,1.53]	[-1.13,1.56]
SDQ							
Borderline							-0.37
							[-2.66,1.93]
Abnormal							1.09
							[-1.27,3.44]
Constant	5.36***	5.86***	6.00***	8.01***	6.93**	6.89**	6.83**

	[4.55,6.17]	[4.82,6.89]	[4.14,7.85]	[3.81,12.22]	[2.57,11.29]	[2.52,11.26]	[2.44,11.23]
N	2336	2336	2336	2336	2336	2336	2336

Source: GUS sweeps 8 and 9, parent and child respondents. Complete case analysis. Figures outside parentheses indicate regression coefficients, figures outside indicate confidence intervals.

Table 9-8 *Changes to parental working patterns*

Variable	Percentage	N
Transition to secondary school affected parent's working pattern		3295
Yes	7.4	
No	92.6	
How transition to secondary school affected parent's working pattern		247
Increase in number of hours worked	32.5	
Reduction in number of hours worked	11.1	
Different working pattern (work the same number of hours but	45.9	
Other	10.5	
Transition to secondary school affected parent partner's working pattern		2586
Yes	2.7	
No	97.3	
How transition to secondary school affected parent partner's working pattern		74
Increase in number of hours worked	9.1	
Reduction in number of hours worked	5.7	
Different working pattern (work the same number of hours but different schedule)	75.0	
Other	10.2	

Source: GUS sweep 9, all parents who responded. Figures indicate weighted percentages.

Table 9-9 *Changes to parental working patterns by socioeconomic characteristics*

Covariate	Transition affected work pattern	Transition did not affect work pattern	N
Main Respondent			
Family type			
Single Parent	8.5	91.5	709
Couple Family	7.1	92.9	2586
Number of children in household			
One	10.0	90.0	1047
Two or three	6.3	93.7	2073
Four or more	5.2	94.8	175
Equivalised income			
Bottom Quintile	5.5	94.5	602
Quintile 2	6.4	93.6	588
Quintile 3	7.9	92.1	664
Quintile 4	8.2	91.8	572
Top Quintile	9.6	90.4	592
Deprivation			
Quintile 5 – most deprived	4.2	95.8	779
Quintile 4	6.5	93.5	488
Quintile 3	9.2	90.8	576
Quintile 2	7.6	92.4	722
Quintile 1 – least deprived	9.5	90.5	730

Covariate	Transition affected work pattern	Transition did not affect work pattern	N
Rurality			
Not rural	7.0	93.0	2519
Rural	8.7	91.3	776
Child has additional support need(s) at S1			
Yes	8.0	92.0	497
No	7.3	92.7	2795
Partner			
Number of children in household			
One	3.2	96.8	748
Two or three	2.7	97.3	1699
Four or more	0.0	100.0	139
Equivalised income			
Bottom Quintile	0.0	100.0	258
Quintile 2	2.4	97.6	415
Quintile 3	2.9	97.1	585
Quintile 4	2.4	97.6	541
Top Quintile	5.1	94.9	572
Deprivation			
Quintile 5 – most deprived	1.2	98.8	480
Quintile 4	1.0	99.0	361
Quintile 3	2.9	97.1	473
Quintile 2	3.9	96.1	623
Quintile 1 – least deprived	3.5	96.5	649
Rurality			
Not rural	2.7	97.3	1928
Rural	2.6	97.4	658
Child has additional support need(s) at S1			
Yes	3.1	96.9	355
No	2.6	97.4	2229

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-10 *Changes to parental working patterns at S1 by socioeconomic and demographic characteristics*

	Changes to parental working pattern				
Covariate	Increase in hours worked	Decrease in hours worked	Different working pattern, same hours	Other	N
Main respondent					
Family type					

	Changes to parental working pattern				
Covariate	Increase in hours worked	Decrease in hours worked	Different working pattern, same hours	Other	N
Single Parent	29.0	16.4	46.4	8.2	58
Couple Family	33.8	9.2	45.7	11.3	189
Number of children in household					
One	31.2	8.3	52.5	8.0	102
Two or three	35.3	12.7	42.2	9.7	137
Four or more	*	*	*	*	*
Equivalised income					
Bottom Quintile	38.6	11.1	40.2	10.1	31
Quintile 2	39.4	14.8	33.1	12.7	39
Quintile 3	37.0	7.8	53.0	2.2	53
Quintile 4	26.9	6.6	55.3	11.1	48
Top Quintile	30.6	5.6	51.8	12.0	58
Deprivation					
Quintile 5 – most deprived	28.8	21.5	41.8	8.0	33
Quintile 4	30.0	19.4	38.2	12.3	34
Quintile 3	30.4	8.2	52.3	9.1	51
Quintile 2	43.2	8.6	35.3	12.9	58
Quintile 1 – least deprived	28.2	6.3	55.8	9.6	71
Rurality					
Not rural	28.7	12.6	47.2	11.5	178
Rural	42.5	7.3	42.3	7.8	69
Child has additional support need(s) at P6 and/or S1					
Yes	14.2	21.1	51.3	13.4	47
No	37.0	8.7	44.5	9.8	200
Partner					
Number of children in household					
One	15.8	5.7	63.8	14.7	23
Two or three	5.8	5.7	80.6	8.0	51
Four or more	*	*	*	*	*
Equivalised income					
Bottom Quintile	*	*	*	*	*
Quintile 2	*	*	*	*	*
Quintile 3	*	*	*	*	*
Quintile 4	*	*	*	*	*
Top Quintile	2.9	11.6	78.8	6.7	28
Deprivation					
Quintile 5 – most deprived	*	*	*	*	*
Quintile 4	*	*	*	*	*
Quintile 3	*	*	*	*	*

	Changes to parental working pattern				
Covariate	Increase in hours worked	Decrease in hours worked	Different working pattern, same hours	Other	N
Quintile 2	13.9	16.2	62.1	7.8	26
Quintile 1 – least deprived	7.4	89.0	3.6	0.0	24
Rurality					
Not rural	12.1	2.5	76.0	9.4	56
Rural	*	*	*	*	*
Child has additional support need(s) at P6 and/or S1					
Yes	8.8	71.2	20.0	0.0	13
No	10.9	5.1	75.8	8.2	61

Source: GUS sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages. * No estimate(s) provided due to low base size.

Table 9-11 *Meeting school related costs*

Variable	Percentage	N
Parent has had additional school related costs since starting S1 due to		3292
After-school child care	0.5	
School uniform	50.3	
Equipment for school (e.g. books, sporting goods)	24.3	
After-school activities/clubs	12.3	
Travel to/from school	16.8	
School trips	36.6	
Child's school lunches	67.0	
Other	2.7	
None of these	14.2	
How difficult to meet these increased costs?		2793
Very difficult	4.0	
Somewhat difficult	27.9	
Not very difficult	42.8	
Not difficult at all	25.3	
How easy or difficult to meet any school related costs		3289
Very easy	17.3	
Easy	31.4	
Neither easy nor difficult	35.0	
Difficult	9.8	
Very difficult	2.1	
No costs associated with child schooling	4.4	

Source: GUS sweep 9, all parents who responded. Figures indicate weighted percentages. * No estimate(s) provided due to low base size.

Table 9-12 *Whether any additional childcare costs at S1 by socioeconomic and demographic characteristics*

	Additional after school childcare costs at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	99.6	0.4	1897
Working - part-time (<35 hrs pr wk)	99.5	0.5	187
Not working	100.0	0.0	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	99.6	0.4	685
Working - part-time (<35 hrs pr wk)	99.7	0.3	1479
Not working	99.0	1.0	465
Family type			
Single Parent	99.3	0.7	708
Couple Family	99.5	0.5	2584
Whether child has older sibling			
No younger siblings	99.6	0.4	1116
Has younger siblings	99.4	0.6	1431
Equivalised income			
Bottom Quintile	99.6	0.4	601
Quintile 2	99.3	0.7	588
Quintile 3	99.4	0.6	664
Quintile 4	99.6	0.4	572
Top Quintile	99.6	0.4	592
Area deprivation			
Quintile 5 - most deprived	99.1	0.9	776
Quintile 4	99.5	0.5	488
Quintile 3	99.4	0.6	576
Quintile 2	99.8	0.2	722
Quintile 1 - least deprived	99.4	0.6	730
Home address rurality			
Not rural	99.5	0.5	2516
Rural	99.4	0.6	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-13 *Whether any additional school uniform costs at S1 by socioeconomic and demographic characteristics*

	Additional school uniform costs at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	55.5	44.5	1897
Working - part-time (<35 hrs pr wk)	55.2	44.8	187
Not working	45.2	54.8	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	55.4	44.6	685
Working - part-time (<35 hrs pr wk)	52.8	47.2	1479
Not working	43.8	56.2	465
Family type			
Single Parent	38.4	61.6	708
Couple Family	53.1	46.9	2584
Whether child has older sibling			
No younger siblings	56.8	43.2	1116
Has younger siblings	48.6	51.4	1431
Equivalised income			
Bottom Quintile	38.5	61.5	601
Quintile 2	39.6	60.4	588
Quintile 3	49.2	50.8	664
Quintile 4	60.4	39.6	572
Top Quintile	64.2	35.8	592
Area deprivation			
Quintile 5 - most deprived	37.2	62.8	776
Quintile 4	41.4	58.6	488
Quintile 3	52.2	47.8	576
Quintile 2	56.9	43.1	722
Quintile 1 - least deprived	59.2	40.8	730
Home address rurality			
Not rural	48.6	51.4	2516
Rural	53.2	46.8	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-14 *Whether any additional school equipment costs at S1 by socioeconomic and demographic characteristics*

	Additional school equipment costs at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	77.4	22.6	1897
Working - part-time (<35 hrs pr wk)	75.3	24.7	187
Not working	75.5	24.5	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	76.9	23.1	685
Working - part-time (<35 hrs pr wk)	78.3	21.7	1479
Not working	70.9	29.1	465
Family type			
Single Parent	73.2	26.8	708
Couple Family	76.5	23.5	2584
Whether child has older sibling			
No younger siblings	77.3	22.7	1116
Has younger siblings	75.7	24.3	1431
Equivalised income			
Bottom Quintile	76.0	24.0	601
Quintile 2	73.0	27.0	588
Quintile 3	73.7	26.3	664
Quintile 4	78.6	21.4	572
Top Quintile	76.7	23.3	592
Area deprivation			
Quintile 5 - most deprived	74.2	25.8	776
Quintile 4	76.2	23.8	488
Quintile 3	76.2	23.8	576
Quintile 2	76.0	24.0	722
Quintile 1 - least deprived	76.1	23.9	730
Home address rurality			
Not rural	75.1	24.9	2516
Rural	77.7	22.3	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-15 *Whether any additional costs for after-school activities or clubs at S1 by socioeconomic and demographic characteristics*

	Additional costs for after-school activities/clubs at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	87.5	12.5	1897
Working - part-time (<35 hrs pr wk)	88.6	11.4	187
Not working	94.3	5.7	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	86.3	13.7	685
Working - part-time (<35 hrs pr wk)	88.2	11.8	1479
Not working	86.8	13.2	465
Family type			
Single Parent	86.1	13.9	708
Couple Family	88.2	11.8	2584
Whether child has older sibling			
No younger siblings	87.7	12.3	1116
Has younger siblings	87.7	12.3	1431
Equivalised income			
Bottom Quintile	88.4	11.6	601
Quintile 2	87.1	12.9	588
Quintile 3	87.3	12.7	664
Quintile 4	89.5	10.5	572
Top Quintile	86.2	13.8	592
Area deprivation			
Quintile 5 - most deprived	89.8	10.2	776
Quintile 4	87.2	12.8	488
Quintile 3	87.9	12.1	576
Quintile 2	86.6	13.4	722
Quintile 1 - least deprived	87.2	12.8	730
Home address rurality			
Not rural	88.7	11.3	2516
Rural	84.6	15.4	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-16 *Whether any additional costs for travel to and/or from school at S1 by socioeconomic and demographic characteristics*

	Additional costs for travel to/from school at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	85.5	14.5	1897
Working - part-time (<35 hrs pr wk)	81.0	19.0	187
Not working	83.4	16.6	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	82.9	17.1	685
Working - part-time (<35 hrs pr wk)	85.7	14.3	1479
Not working	80.4	19.6	465
Family type			
Single Parent	78.7	21.3	708
Couple Family	84.5	15.5	2584
Whether child has older sibling			
No younger siblings	83.9	16.1	1116
Has younger siblings	83.8	16.2	1431
Equivalised income			
Bottom Quintile	79.1	20.9	601
Quintile 2	82.2	17.8	588
Quintile 3	83.3	16.7	664
Quintile 4	86.2	13.8	572
Top Quintile	85.1	14.9	592
Area deprivation			
Quintile 5 - most deprived	74.5	25.5	776
Quintile 4	81.7	18.3	488
Quintile 3	88.2	11.8	576
Quintile 2	85.7	14.3	722
Quintile 1 - least deprived	85.6	14.4	730
Home address rurality			
Not rural	81.1	18.9	2516
Rural	89.7	10.3	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-17 *Whether any additional school trip costs at S1 by socioeconomic and demographic characteristics*

	Additional school trip costs at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	63.9	36.1	1897
Working - part-time (<35 hrs pr wk)	62.1	37.9	187
Not working	65.7	34.3	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	62.1	37.9	685
Working - part-time (<35 hrs pr wk)	64.8	35.2	1479
Not working	62.9	37.1	465
Family type			
Single Parent	62.6	37.4	708
Couple Family	63.6	36.4	2584
Whether child has older sibling			
No younger siblings	64.5	35.5	1116
Has younger siblings	63.9	36.1	1431
Equivalised income			
Bottom Quintile	65.5	34.5	601
Quintile 2	63.0	37.0	588
Quintile 3	66.0	34.0	664
Quintile 4	61.8	38.2	572
Top Quintile	59.6	40.4	592
Area deprivation			
Quintile 5 - most deprived	66.5	33.5	776
Quintile 4	64.0	36.0	488
Quintile 3	63.6	36.4	576
Quintile 2	61.3	38.7	722
Quintile 1 - least deprived	61.9	38.1	730
Home address rurality			
Not rural	64.4	35.6	2516
Rural	60.1	39.9	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-18 *Whether any additional school lunch costs at S1 by socioeconomic and demographic characteristics*

Covariate	Additional school lunch costs at S1		N
	No	Yes	
Partner employment status			
Working - full-time (>=35 hrs pr wk)	32.9	67.1	1897
Working - part-time (<35 hrs pr wk)	32.0	68.0	187
Not working	40.6	59.4	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	32.7	67.3	685
Working - part-time (<35 hrs pr wk)	30.4	69.6	1479
Not working	38.7	61.3	465
Family type			
Single Parent	33.9	66.1	708
Couple Family	32.7	67.3	2584
Whether child has older sibling			
No younger siblings	35.5	64.5	1116
Has younger siblings	31.3	68.7	1431
Equivalised income			
Bottom Quintile	35.2	64.8	601
Quintile 2	28.8	71.2	588
Quintile 3	29.4	70.6	664
Quintile 4	35.9	64.1	572
Top Quintile	36.7	63.3	592
Area deprivation			
Quintile 5 - most deprived	31.9	68.1	776
Quintile 4	30.6	69.4	488
Quintile 3	32.0	68.0	576
Quintile 2	32.2	67.8	722
Quintile 1 - least deprived	38.2	61.8	730
Home address rurality			
Not rural	33.6	66.4	2516
Rural	31.1	68.9	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-19 *Whether any other additional costs at S1 by socioeconomic and demographic characteristics*

	Additional costs for something else at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	97.0	3.0	1897
Working - part-time (<35 hrs pr wk)	98.7	1.3	187
Not working	95.6	4.4	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	97.2	2.8	685
Working - part-time (<35 hrs pr wk)	97.1	2.9	1479
Not working	97.5	2.5	465
Family type			
Single Parent	97.4	2.6	708
Couple Family	97.2	2.8	2584
Whether child has older sibling			
No younger siblings	97.8	2.2	1116
Has younger siblings	96.9	3.1	1431
Equivalised income			
Bottom Quintile	97.9	2.1	601
Quintile 2	97.8	2.2	588
Quintile 3	96.3	3.7	664
Quintile 4	96.6	3.4	572
Top Quintile	98.0	2.0	592
Area deprivation			
Quintile 5 - most deprived	96.6	3.4	776
Quintile 4	97.1	2.9	488
Quintile 3	97.3	2.7	576
Quintile 2	97.6	2.4	722
Quintile 1 - least deprived	97.6	2.4	730
Home address rurality			
Not rural	97.5	2.5	2516
Rural	96.4	3.6	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-20 *Whether there are no additional school costs at S1 by socioeconomic and demographic characteristics*

	No additional school costs at S1		
Covariate	**No**	**Yes**	**N**
Partner employment status			
Working - full-time (>=35 hrs pr wk)	85.0	15.0	1897
Working - part-time (<35 hrs pr wk)	83.9	16.1	187
Not working	79.9	20.1	126
Main respondent employment status			
Working - full-time (>=35 hrs pr wk)	85.0	15.0	685
Working - part-time (<35 hrs pr wk)	86.7	13.3	1479
Not working	83.9	16.1	465
Family type			
Single Parent	88.6	11.4	708
Couple Family	84.9	15.1	2584
Whether child has younger sibling			
No younger siblings	83.2	16.8	1116
Has younger siblings	87.1	12.9	1431
Equivalised income			
Bottom Quintile	85.6	14.4	601
Quintile 2	89.0	11.0	588
Quintile 3	86.7	13.3	664
Quintile 4	83.8	16.2	572
Top Quintile	84.2	15.8	592
Area deprivation			
Quintile 5 - most deprived	88.4	11.6	776
Quintile 4	87.6	12.4	488
Quintile 3	85.0	15.0	576
Quintile 2	84.5	15.5	722
Quintile 1 - least deprived	83.6	16.4	730
Home address rurality			
Not rural	85.5	14.5	2516
Rural	86.6	13.4	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-21 *Parent reported difficulty in meeting additional school costs at S1 by socioeconomic and demographic characteristics*

	How difficult to meet increased costs				
Covariate	**Very difficult**	**Somewhat difficult**	**Not very difficult**	**Not difficult at all**	**N**
Partner employment status					
Working - full-time (>=35 hrs pr wk)	1.0	17.8	47.5	33.7	1594
Working - part-time (<35 hrs pr wk)	3.9	27.0	45.3	23.7	155
Not working	6.6	44.1	32.1	17.2	102
Main respondent employment status					
Working - full-time (>=35 hrs pr wk)	1.7	19.5	44.3	34.5	575
Working - part-time (<35 hrs pr wk)	2.2	23.1	46.5	28.3	1266
Not working	5.1	38.9	38.6	17.4	382
Family type					
Single Parent	10.4	46.4	34.9	8.3	620
Couple Family	2.0	22.0	45.3	30.7	2173
Whether child has younger sibling in household					
No younger siblings	3.5	21.5	44.1	30.8	910
Has younger siblings	2.3	26.3	44.7	26.6	1237
Equivalised income					
Bottom Quintile	11.1	48.3	34.0	6.7	511
Quintile 2	4.1	40.9	42.8	12.2	516
Quintile 3	2.1	22.5	50.2	25.2	571
Quintile 4	10.8	46.5	42.7	0.0	477
Top Quintile	0.3	6.0	42.1	51.6	494
Deprivation					
Quintile 5 – most deprived	8.2	43.5	37.2	11.2	674
Quintile 4	6.9	35.7	40.9	16.5	421
Quintile 3	2.8	22.6	46.6	28.0	486
Quintile 2	1.8	24.0	43.5	30.6	608
Quintile 1 – least deprived	0.7	13.4	45.9	40.0	604
Rurality					
Not rural	4.3	30.4	42.0	23.3	2123
Rural	3.3	19.6	45.3	31.8	670

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-22 *Parent reported difficulty in meeting any school related costs at S1 by socioeconomic and demographic characteristics*

	How easy/difficult to pay any costs associated with child's school						
Covariate	**Very easy**	**Easy**	**Neither easy nor difficult**	**Difficult**	**Very difficult**	**No schooling costs**	**N**
Partner employment status							
Working - full-time (>=35 hrs pr wk)	23.1	36.6	30.8	4.3	0.7	4.6	1897
Working - part-time (<35 hrs pr wk)	18.0	27.5	37.3	11.6	0.4	5.2	187
Not working	8.1	23.6	42.6	19.2	3.2	3.3	126
Main respondent employment status							
Working - full-time (>=35 hrs pr wk)	22.0	35.0	33.3	5.2	0.6	4.0	685
Working - part-time (<35 hrs pr wk)	19.5	35.1	33.8	6.3	1.6	3.7	1479
Not working	10.3	25.3	39.2	17.0	2.8	5.3	465
Family type							
Single Parent	3.6	22.3	44.8	20.1	5.7	3.5	708
Couple Family	21.5	34.1	32.1	6.7	1.0	4.7	2581
Whether child has younger sibling in household							
No younger siblings	20.5	34.6	31.0	7.4	1.8	4.7	1116
Has younger siblings	17.7	32.0	36.6	8.2	1.5	4.0	1431
Equivalised income							
Bottom Quintile	3.9	17.6	46.3	22.6	5.2	4.5	601
Quintile 2	6.2	27.0	48.4	11.9	2.6	4.1	588
Quintile 3	16.7	40.6	32.5	5.7	1.2	3.3	664
Quintile 4	31.8	39.7	22.5	2.2	3.8	0.0	572
Top Quintile	36.1	35.2	21.4	1.4	0.1	5.8	592
Deprivation							
Quintile 5 – most deprived	7.7	22.8	41.4	18.7	3.9	5.5	773
Quintile 4	11.4	31.1	37.0	14.0	2.5	4.1	488
Quintile 3	19.5	31.3	36.9	5.1	2.8	4.4	576
Quintile 2	20.5	33.9	32.9	7.8	1.1	3.8	722
Quintile 1 – least deprived	26.6	37.2	27.8	3.8	0.2	4.3	730
Rurality							
Not rural	15.7	30.6	36.8	10.6	1.9	4.4	2513
Rural	22.7	33.8	29.5	7.1	2.5	4.5	776

Source: GUS, sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-23 *Change in parent partner relationship status between P6 and S1 by socioeconomic and demographic characteristics*

Covariate	Change in main parent partner relationship status			N
	No change	Re-partnered	Separated	
Gender				
Male	92.6	2.5	4.9	1379
Female	92.8	2.6	4.6	1382
Equivalised income				
Bottom Quintile	82.7	2.7	14.6	409
Quintile 2	91.0	4.8	4.3	459
Quintile 3	94.9	2.0	3.2	590
Quintile 4	97.5	1.1	1.4	539
Top Quintile	98.5	0.8	0.7	567
Deprivation				
Quintile 5 – most deprived	90.7	3.4	5.9	341
Quintile 4	88.8	3.8	7.4	449
Quintile 3	92.2	3.4	4.4	545
Quintile 2	94.6	1.7	3.7	717
Quintile 1 – least deprived	95.8	1.0	3.2	709
Rurality				
Not rural	92.1	2.6	5.3	2012
Rural	94.3	2.4	3.3	749

Source: GUS, sweeps 8 and 9, all parents who responded at both sweeps. Figures indicate weighted percentages.

Table 9-24 *Child experiencing bullying by socioeconomic and demographic characteristics*

	Child experienced bullying				
Covariate	**Neither P6 nor S1**	**P6 only**	**S1 only**	**P6 and S1**	**N**
Gender					
Male	49.1	21.5	10.8	18.6	1313
Female	53.0	18.9	10.4	17.7	1340
Equivalised income					
Bottom Quintile	44.6	24.5	7.3	23.5	386
Quintile 2	48.7	20.4	9.7	21.2	436
Quintile 3	51.0	22.3	10.7	16.0	567
Quintile 4	56.3	15.5	12.2	16.0	526
Top Quintile	57.7	16.0	12.2	14.1	554
Deprivation					
Quintile 5 – most deprived	49.7	19.3	8.0	23.0	321
Quintile 4	49.6	24.0	7.4	19.0	431
Quintile 3	49.9	24.3	9.0	16.8	517
Quintile 2	51.8	15.6	14.0	18.6	698
Quintile 1 – least deprived	53.4	19.0	12.4	15.2	686
Rurality					
Not rural	51.5	20.4	10.6	17.5	1930
Rural	49.9	19.7	10.5	19.9	723

Source: GUS sweeps 8 and 9, where child responded at both sweeps. Figures indicate weighted percentages.

Table 9-25 *Children reported as having any additional support needs by socioeconomic and demographic characteristics*

	Child had any additional support needs				
Covariate	**Neither P6 nor S1**	**P6 only**	**S1 only**	**P6 and S1**	**N**
Gender					
Male	75.1	4.4	6.3	14.2	1374
Female	85.5	3.1	4.1	7.3	1378
Equivalised income					
Bottom Quintile	76.9	2.6	6.7	13.8	406
Quintile 2	75.2	4.0	7.8	12.9	459
Quintile 3	78.4	5.1	4.4	12.2	587
Quintile 4	85.7	3.0	3.5	7.8	538
Top Quintile	86.4	3.5	3.7	6.3	567
Deprivation					
Quintile 5 – most deprived	81.8	4.2	4.5	9.5	707
Quintile 4	79.7	4.2	4.1	11.9	715
Quintile 3	83.0	3.2	4.2	9.6	544
Quintile 2	79.7	3.2	5.9	11.1	447
Quintile 1 – least deprived	75.8	4.0	8.5	11.7	339
Rurality					
Not rural	80.0	3.5	5.6	10.8	2005
Rural	81.0	4.5	3.9	10.6	747

Source: GUS sweeps 8 and 9, where child responded at both sweeps. Figures indicate weighted percentages.

Table 9-26 *Change in other life and developmental events between P6 and S1*

Variable		Percentage	N
Change in parent partner status			2761
	No change	92.7	
	Re-partnered	2.5	
	Separated	4.8	
Child experienced bullying at:			2653
	Neither P6 nor S1	51.1	
	P6 only	20.2	
	S1 only	10.6	
	P6 and S1	18.1	
Number of upsetting life events since P6			2469
	None	46.2	
	One or more	53.8	

Source: GUS sweeps 8 and 9, all parents/children who responded at both sweeps.

Table 9-27 *Number of upsetting life events experienced by child between P6 and S1*

	Number of upsetting events		
Covariate	**None**	**One or more**	**N**
Gender			
Male	48.4	51.6	1243
Female	43.9	56.1	1226
Equivalised income			
Bottom Quintile	33.2	66.8	350
Quintile 2	46.2	53.8	402
Quintile 3	45.8	54.2	539
Quintile 4	49.1	50.9	499
Top Quintile	56.5	43.5	515
Area Deprivation			
Quintile 5 – most deprived	41.0	59.0	290
Quintile 4	39.6	60.4	393
Quintile 3	47.8	52.2	485
Quintile 2	48.9	51.1	659
Quintile 1 – least deprived	52.9	47.1	642
Rurality			
Not rural	45.7	54.3	1780
Rural	47.9	52.1	689

Source: GUS sweeps 8 and 9, all parents who responded. Figures indicate weighted percentages.

Table 9-28 *Linear regression model of changes in cognitive ability between P6 and S1 by socioeconomic, demographic factors and other developmental and upsetting life events.*

Transition					
Moderate	-1.49*	-1.50**	-1.49*	-1.49*	-1.49*
	[-2.62,-0.35]	[-2.64,-0.37]	[-2.62,-0.36]	[-2.62,-0.35]	[-2.63,-0.34]
Negative	-2.10*	-2.12*	-2.16**	-2.17**	-2.19*
	[-3.74,-0.47]	[-3.75,-0.49]	[-3.79,-0.53]	[-3.80,-0.54]	[-3.86,-0.51]
Gender	0	0	0	0	0
Female	-0.8	-0.77	-0.79	-0.81	-0.82
	[-1.89,0.29]	[-1.86,0.31]	[-1.87,0.29]	[-1.90,0.27]	[-1.91,0.26]
Equivalised income	0	0	0	0	0
Quintile 2	0.2	0.16	-0.06	-0.05	-0.06
	[-1.88,2.28]	[-1.93,2.25]	[-2.14,2.02]	[-2.13,2.02]	[-2.15,2.02]
Quintile 3	0.45	0.39	0.16	0.22	0.22
	[-1.54,2.43]	[-1.59,2.38]	[-1.84,2.15]	[-1.78,2.21]	[-1.78,2.21]
Quintile 4	0.29	0.3	0.04	0.11	0.09
	[-1.80,2.38]	[-1.79,2.39]	[-2.07,2.15]	[-2.00,2.22]	[-2.03,2.20]
Top income quintile	0.98	0.96	0.69	0.76	0.74
	[-1.05,3.02]	[-1.07,3.00]	[-1.38,2.75]	[-1.31,2.83]	[-1.34,2.82]
Parent education					
Other qualification	3.12	2.99	3.08	3.1	3.02
	[-3.00,9.24]	[-3.23,9.21]	[-3.04,9.19]	[-3.05,9.25]	[-3.19,9.22]
Lower level Standard Grades and Vocational qualifications	-1.49	-1.39	-1.48	-1.51	-1.49
	[-7.12,4.14]	[-7.05,4.27]	[-7.09,4.12]	[-7.10,4.09]	[-7.04,4.07]
Upper level Standard Grades and Intermediate Vocational qualifications	-2.34	-2.36	-2.5	-2.46	-2.48
	[-6.75,2.06]	[-6.79,2.07]	[-6.88,1.88]	[-6.85,1.93]	[-6.86,1.91]

Higher grades and Upper level vocational qualifications	-2.93	-2.9	-3.04	-3	-2.98
	[-7.27,1.40]	[-7.26,1.45]	[-7.33,1.25]	[-7.31,1.30]	[-7.28,1.31]
Degree level academic and vocational qualifications	-1.97	-1.93	-2.09	-2.06	-2.06
	[-6.32,2.37]	[-6.30,2.44]	[-6.40,2.23]	[-6.39,2.27]	[-6.38,2.25]
Deprivation					
Quintile 2	0.58	0.6	0.57	0.57	0.54
	[-0.87,2.03]	[-0.85,2.04]	[-0.87,2.02]	[-0.87,2.02]	[-0.90,1.99]
Quintile 3	0.51	0.55	0.51	0.5	0.5
	[-1.05,2.07]	[-1.01,2.11]	[-1.06,2.07]	[-1.07,2.06]	[-1.06,2.07]
Quintile 4	1.16	1.2	1.15	1.12	1.11
	[-0.52,2.85]	[-0.48,2.88]	[-0.53,2.82]	[-0.56,2.79]	[-0.57,2.79]
Quintile 5 – most deprived	1.5	1.54	1.43	1.42	1.38
	[-0.52,3.52]	[-0.48,3.55]	[-0.58,3.44]	[-0.59,3.43]	[-0.62,3.39]
Rurality					
Rural	0.22	0.22	0.14	0.16	0.16
	[-1.12,1.57]	[-1.12,1.56]	[-1.20,1.49]	[-1.18,1.51]	[-1.19,1.50]
SDQ					
Borderline	-0.42	-0.48	-0.34	-0.35	-0.38
	[-2.69,1.86]	[-2.78,1.82]	[-2.65,1.97]	[-2.65,1.96]	[-2.73,1.96]
Abnormal	1.11	0.92	0.93	0.81	0.73
	[-1.31,3.52]	[-1.54,3.38]	[-1.51,3.36]	[-1.63,3.24]	[-1.76,3.22]
Additional support needs present					
At P6		-0.85	-0.8	-0.8	-0.73
		[-4.04,2.35]	[-3.98,2.39]	[-3.98,2.38]	[-3.90,2.45]
At S1		-1.96	-1.94	-1.96	-1.89
		[-5.57,1.65]	[-5.54,1.66]	[-5.56,1.64]	[-5.48,1.70]

At P6 and/or S1		2.91	2.8	2.77	2.66
		[-1.37,7.19]	[-1.48,7.07]	[-1.51,7.05]	[-1.61,6.92]
Change in parent partner status					
Repartnered			1.41	1.43	1.43
			[-3.81,6.63]	[-3.77,6.63]	[-3.80,6.66]
Separated			-2.6	-2.83	-2.86
			[-5.50,0.29]	[-5.81,0.15]	[-5.85,0.12]
Number of upsetting life events between P6 and S1				0.29	0.3
				[-0.28,0.86]	[-0.27,0.87]
Experience of bullying at P6 and/or S1					
Bullied at P6 only					-0.47
					[-1.90,0.96]
Bullied at S1 only					-0.22
					[-1.99,1.55]
Bullied at P6 and S1					0.31
					[-1.24,1.87]
Constant	6.91**	6.77**	7.24**	6.98**	7.07**
	[2.50,11.31]	[2.34,11.19]	[2.84,11.65]	[2.48,11.48]	[2.55,11.60]
N	2328	2328	2328	2328	2328

Source: GUS sweeps 8 and 9, parent and child respondents. Complete case analysis. Figures outside parentheses indicate regression coefficients, figures outside indicate confidence intervals.

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